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<110> Bunch, Roderick T.  
Morris, Dale L.  
Curtiss, Sandra W.  
Rodi, Charles P.

<120> BIOMARKERS AND ASSAYS FOR CARCINOGENESIS

<130> 3170/00/US

<140> US/09/490,609

<141> 2000-01-25

<150> US 60/118 078

<151> 1999-01-29

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gaaacaaaaa tatttttgta atcatcaaatt ttatactagc tatctgggtg ttagcatatc 180

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120		
ctaaataggc	caccaagtga	cagcaaaatg
gtgccaaagn	tctactacag	cactgctaag
180		
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accatgtttt	ctctcaggac	actttctgtg
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 gaagaccata ggccctgacac aggatgtcag tcaatgtcac agaattggatt tgaacactct   180  
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 gttctctgtg aaggccacac cctgagtggt ccagtccttc cctgggctcc tcatatgaga   300  
 gctaggcatt gtctgatgtg gtgacctgc agggacagcc ctttgttctt gacagccaca   360  
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 gccctggagt agggcccagg atgcaggctc taatgtctat ccccgccgct cttcttccc 180  
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<213>      Rattus norvegicus

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<223>      unsure at all n locations

<400>      45

gatcccaacg tcaagtcaat ctttgtcacc tgtggagacn ggacttgaaa gtcatgcttc   60
cagggccagt ccatatttta ggtttgcagt ggccgggatta cttcaagcag tggatta   117

<210>      46
<211>      105
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(105)
<223>      unsure at all n locations

<400>      46

gatccagttc caggatgtgt gtccttgatc cttctctctt gcctgctggc actgacnagt   60
gcccatgaca agccttcctt tcaccactgt cggacgacat gatta   105

<210>      47
<211>      52
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(52)
<223>      unsure at all n locations

<400>      47

gacccatagt gtctcnaaga ataagcacac tcagactaac acagtcccat ta   52

<210>      48
<211>      442
<212>      DNA
<213>      Rattus norvegicus

<400>      48

gatctcgaga cggatagcct cattcagacg accatccgaa aggagttctc ccagtgcacg   60
gtcatcacca tcgtccacag gctgcacacc atcatggaca gtgacaagat aatggctcta   120
gacaacggga agattgtcga gtatggcagt cctgaagaac tgctgtccaa cagaggttcc   180
ttctatctga tggccaagga agccggcatt gaaaatgtga atcacacaga agctctagca   240
gttggttccg ttgctggcgg gactataaga acagtttcta ttatttgctt tgggtttctg   300
tgactgtgct ctagggtgcaa agacacatat tttgttcccg ttgctcaggc tgggcctcaa   360
actctaaggt ccagcaatct ctggtctcag ccagagacct gtaaaaaatg acacttcaaa   420
gattatcatg aataaatatt ta   442

<210>      49
<211>      227

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<212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(227)  
 <223> unsure at all n locations

<400> 49

gattctacgga ggacggcaga gaaacgggtgt caggcccagc cacttcagca gaggtcttaa 60  
 gagtgtggcc cgcgggttc tccaagcct ggangggctg aaaatgggtg aaaaggacca 120  
 agatggggcc gcaagctaac acctcaggga cagagagatc tggacaggat cgcgggacag 180  
 gtggcatgct gccacaaga agcattagaa caaaggatgc tgggtta 227

<210> 50  
 <211> 248  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(248)  
 <223> unsure at all n locations

<400> 50

gattcaccac nggetaactn ttacgannn tgcggagccc ctataaagt cctntgacca 60  
 acggacacaa gaggaatata cctggaagt gaaccaagt gaaagaatga gctgtgagac 120  
 tggatagtta tggtgctca agctgacct tctgagtgg cggggctagc accccagtgt 180  
 ccataagca aggtctatcc ttctgagtgg gcaggctagc actccagtgt ccaggnattc 240  
 cagtctta 248

<210> 51  
 <211> 113  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(113)  
 <223> unsure at all n locations

<400> 51

gattcaactt nncagnnaan tgggagctan ctatctggaa tccacagctt gatgatttnt 60  
 acatcggaaa gtactttggg aggtgttgg agtatttnt gattcaagcc tta 113

<210> 52  
 <211> 198  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(198)  
 <223> unsure at all n locations

<400> 52

gattcctaca agaggagac aanacttcaa catagtgtgt gagctattct cttcgggtccg 60

atcataccta gtagtttgag cctctacct tgagaaatcc agatggatga agaaaagata 120  
gctaacagct accagagggt gcatttggat gaaggaataa catctaagt tntacaggat 180  
aa-mntaact gacaatta 198

<210> 53  
<211> 166  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(166)  
<223> unsure at all n locations

<400> 53

gttccatcg ctcangcgc anntcagggt cantcttga gagagatccc aaaattcttc 60  
aggcaacacc tcttccagtc tggagnnaac tctaaatagt gtgaccatgt aggacagagt 120  
aangggcagg gagtgaatta gagaagagtt ggnngtctgg ggatta 166

<210> 54  
<211> 190  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(190)  
<223> unsure at all n locations

<400> 54

gattccgagga catnctnctg gattcacaac tcttcaacct caggacggcg acgtcgtctca 60  
atgggggattg gtttttcgat tgtcgtggcc tctgacaaaa gagaaaagat agaagagaac 120  
ggcagcatga gagtttttgt gcagcacatc gatgtcttgg agaattcctt aggctnctag 180  
tctcgtatta 190

<210> 55  
<211> 178  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(178)  
<223> unsure at all n locations

<400> 55

gattctagtt cagggnnngc tgnaggtaaa agctgttcta cagtcactct ctctctaata 60  
cagtgtgtg acgtnacttc taatagacga naattagana cagcctgctt gcccataaca 120  
ggaaagtgat cactgagatg atagcgtgtc catttgatgg gccnctcag caacgtta 178

<210> 56  
<211> 240  
<212> DNA  
<213> Rattus norvegicus

<220>  
 <221>       unsure  
 <222>       (1)..(240)  
 <223>       unsure at all n locations  
  
 <400>       56  
  
 gatcttatgt tccgncggaa cataacctgtg tgagtgaat atgnanttct gaaaggatng   60  
 gtttacaac tacagaacgc acctcccggt ctctctgtct taagatgcta aatatgaaag   120  
 ccaangtttc acagcccaga tcatccacng cactgcttta ctgattcgga agtttctctt   180  
 gaggatactc cagatacacc tgagacatta tanatcatat atcaannngc acaaata   240  
  
 <210>       57  
 <211>       222  
 <212>       DNA  
 <213>       Rattus norvegicus  
  
 <220>  
 <221>       unsure  
 <222>       (1)..(222)  
 <223>       unsure at all n locations  
  
 <400>       57  
  
 gatctacagg angancaagc ttngtntang tattgatgag gatgatccta ctgtggatga   60  
 taccagtgtc gctgtaactg aagaaatgcc acctctggaa ggagatgatg acacatcacg   120  
 cctcgaagaa gtgactagg ctccaccagn actatgtgtt tgatgcttac ctccattcct   180  
 tctatnata tttttccat gattttngnt ttattttgt ta   222  
  
 <210>       58  
 <211>       112  
 <212>       DNA  
 <213>       Rattus norvegicus  
  
 <220>  
 <221>       unsure  
 <222>       (1)..(112)  
 <223>       unsure at all n locations  
  
 <400>       58  
  
 gatctagaaa gcacnnncag tttctggant tatagcacia atccacttgt attatctctt   60  
 tcatatnaca atttatgntc ccttgtgtca ttgtgnccc attcctgagt ta   112  
  
 <210>       59  
 <211>       176  
 <212>       DNA  
 <213>       Rattus norvegicus  
  
 <220>  
 <221>       unsure  
 <222>       (1)..(176)  
 <223>       unsure at all n locations  
  
 <400>       59  
  
 gatctccttg cagcttgac cctgtngcag taggcaccaa ggagaattac agtctcctga   60  
 gaagaaagct agnacaaatg cagaagaaag atgtctgac tgcccttcat gttgngagtt   120  
 tgtgagtgtg tgcattganc ctctgttcag atctgtgtct nnggttttagc cattta   176

<210> 60  
 <211> 91  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(91)  
 <223> unsure at all n locations  
  
 <400> 60  
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 ggtgacacgg ggccttggnn acacaacctt a 91

<210> 61  
 <211> 332  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(332)  
 <223> unsure at all n locations  
  
 <400> 61  
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 aacactctat cacatcacan tgtggacatt cctccttgc ctgggacact tentctcgga 120  
 gttgttgta ttggnacag cggctcccac agttggtgtg ctggcaccct tgatggtagc 180  
 aagttctca atcctgggta tgcctagttg gctccggtac ctanaagcag aaccagtatc 240  
 cagacagaag naaagaaatt gaggccancc ttgncagctc tgatacatca tggtnctcca 300  
 ctttgcctc nttannca cctctgtcct ta 332

<210> 62  
 <211> 274  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(274)  
 <223> unsure at all n locations  
  
 <400> 62  
 gatctgattc agaccaagga aaatatgcaa aatatgtgag ggccgatgga atcactaggg 60  
 acaatatcat tgatctaacc aagactgac gctgtctcca ggcccgagga tgaagaaagg 120  
 cctgagcctc cagtggnnnn nnnnnnnnnn nncaccagga ctctagcacc accatttctc 180  
 gtcacatggag catctgaga caaattctgc gatctgatgt ccacctctg tcacagaaaa 240  
 gtgcaatcct gctctccag ctcttcccta atta 274

<210> 63  
 <211> 70  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>



<221> unsure  
 <222> (1)..(70)  
 <223> unsure at all n locations  
  
 <400> 63  
 gatcttcaat tacnnngtgn atgtactca accctgaata nanttcatac acagnccagt 60  
 tatctgctta 70  
  
 <210> 64  
 <211> 280  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(280)  
 <223> unsure at all n locations  
  
 <400> 64  
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 ggcacttas tataggtnat aaggtcactg tgnccctcag caggnccaag cactgcatgt 120  
 aggaaggaa ggttcagga gctgtccaga gcgccattta gctctccttc tgtttaggaa 180  
 ataaagacag ggtgtgcaaa gagaggcagt cagcactccc tctgtctcag ggaaccttgg 240  
 acagctgttg acaggcatgg ggtannncta ctcttcatta 280  
  
 <210> 65  
 <211> 202  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(202)  
 <223> unsure at all n locations  
  
 <400> 65  
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 agacagacag gccatcagtg tggaatgtcc gagaaggcga ttgaaaagtt tatcagacag 120  
 ctactcgaaa agaattgactc aaagggaacca cccagttacc ctctccttat agccatgtat 180  
 aagtcnnctn actctgggat ta 202  
  
 <210> 66  
 <211> 162  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <220>  
 <221> unsure  
 <222> (1)..(162)  
 <223> unsure at all n locations  
  
 <400> 66  
 gatctttggg ncagtnatgt ccattctaac atttgagact gaagccgang ttctggagcg 60  
 ggccaatgac accacgttng gactagcagc tggggtcttt accaggacat tcagaggcgc 120  
 acaggtggcg gctgagctnc aggcgcnaa cgtgctacat ta 162

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<210>      67
<211>      57
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(57)
<223>      unsure at all n locations

<400>      67
gatctttata gacatgaatg cacaactcat tgaatggcaa gaannttctt gtcatta      57


<210>      68
<211>      131
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(131)
<223>      unsure at all n locations

<400>      68
gatctttgca gacnnccaaa ttctctctac cagagagtat ataattactt gagtttcttc      60
tgttaqtaaan agagaatgtc ttagtgtggt tgtgagtgac agtgaaattc aatgncnnta      120
aaaggacatt a                                                    131


<210>      69
<211>      77
<212>      DNA
<213>      Rattus norvegicus

<400>      69
gatedacttc taatctggat gctgagctgg gaagacacac ccccttatca ggtcttgagt      60
gagaagacac ctgttta                                                    77


<210>      70
<211>      353
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(353)
<223>      unsure at all n locations

<400>      70
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acactttgga actggtggtg tagccctcag tatcatcttg aacaccagtt ggggtcctg      120
cagtgcctt tgtgcttcac tgggttttgg acgaagcagt gagggccctg cttcctgtca      180
tgtagtgact gtagtgtgct gcgtgactat ctcggtcaag tcccgtaag aagatgaaag      240
tccacagcaa aaggcangtt cgattcccag tgccctgctca cagctgcttg tatcttgatc      300
tgcaggggac cctgtgcctc tggtttctgt ggatacaaat gtgtatgcc tta      353

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<210> 71  
 <211> 187  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 71  
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 ggtctctaata caccacgac atcagatga attctgcctt atgccttgac ttcggtcatt 120  
 tcccttgaga ttcatactgt gattcccgct gtattcctag ccttgccatt ttctgacat 180  
 gctttaa 187

<210> 72  
 <211> 116  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 72  
 gatccgagcc tcttgtgctt actgtgacac agaacagata tcaccagact ggagcccatc 60  
 aactgagccc cuatgctctc tacacaccag aattctatct tttagcagtg acttta 116

<210> 73  
 <211> 147  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 73  
 gatccggtat ctattgtcct cataacacct ggctcccaag acttgattgt gaatgactag 60  
 gttattagca gaatgaagga tggcctcaaa cgaagaaaga tgcatacccc tcgaggctct 120  
 tcagaatgct gcatagaggc ttactta 147

<210> 74  
 <211> 195  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 74  
 gatcctgggt gacctccct gaagcagtga gcaccacagg ttctgctgtg gaccagagcc 60  
 cccctgtgga gagggagaaa gaaaggggag ccgctgacct gcagggatac agaccttccc 120  
 cacagcctgg cagccgcccg ttgtttgcag cttattatca gactgtgggc tatcatagtt 180  
 catgctcgtt tctta 195

<210> 75  
 <211> 100  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 75  
 gatcctagcc acatctgaag ccatgaacat aattctcatt cttacagaca cataccagcc 60  
 ttgaacaact tattttcctt gtatcgatag aggggtgctta 100

<210> 76

<211> 395  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 76  
 gatctaacac tgcagtgaac tgactgactg tgcacagetc ttgcctctca tgaaatgtgc 50  
 ctggttggtc tgcctcatcc tgcctctga gagcgtggtt cacagacctt gtgtctgagt 120  
 gaagggaaac caggttcaga ttccgtttct ctgctctgt cttttctca gcagcagggt 180  
 aggtacaggc cttttgtgca catataacag atgaagccca tgatgagtct gtgggaaaca 240  
 ccaactca tgcacctgt gggtagacct cctacacag cgcagagcag agagagcccg 300  
 ggaggtgctg caggttcac tgagcttcc ttgccagac tggcaaccga ctttgctctc 360  
 tttgaaaga cctagctaa agtcagcgtt gttta 375

<210> 77  
 <211> 56  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(56)  
 <223> unsure at all n locations  
 <400> 77

gatctacagg atgatcaagc ttggtctagg taaattgcag gntacgtgtt cattta 56

<210> 78  
 <211> 164  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(164)  
 <223> unsure at all n locations  
 <400> 78

gatctacgaa gccatttacc acgggggteen natggtgggc attcccatgt ttggtgatca 60  
 gccttacaac atcgtcaca tggaggccaa gggagcagcc gtgaaagtcg ccatcaacac 120  
 gatgaccagc gcagatttgc tcagtgcctt gagagcggtc attta 164

<210> 79  
 <211> 207  
 <212> DNA  
 <213> Rattus norvegicus

<400> 79  
 gatctccacc gaactggtga agagcaagct cagggagacc actggggcag cctgcaaata 60  
 tggggccttt gggctgccca ccaactgttgc ccactggat ggtaaaacct acatgctatt 120  
 tgggtctgac cgcattggagt tgcctagctta cctgctagga gagaagtga tgggcctgt 180  
 gccccaacc ctgaatgccca gacttta 207

<210> 80  
 <211> 112

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(112)
<223>      unsure at all n locations

<400>      80

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atgacacatc ccgggagttg ccacactagc aagagcctgg ctgnttcctt ta           112

<210>      81
<211>      183
<212>      DNA
<213>      Rattus norvegicus

<400>      81

gatctccaaa ggcagaatt tccacagaca atctcttcac aactgtttgg aaggcattta   60
gcacaattcc tgtgtgagtt ggaatgatgt atttgcttac caaagctcaa gatcatccac  120
aggacaacca cagagtccac atcaaaggag agaggtgggc tttgttgatc cagactggcc  180
tta                                                183

<210>      82
<211>      118
<212>      DNA
<213>      Rattus norvegicus

<400>      82

gatctcctgg ttttctaaaa gactgaccaa taattcttca catgtcagaa tctgttatgt   60
ttgtctgacc tccatgggag attttgtttc tggctaaaat aaaggctaaa taagctta   118

<210>      83
<211>      264
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(264)
<223>      unsure at all n locations

<400>      83

gatctcggaa gagctctggg tctcacttgt ttttccata gactgaccat ccagggtccc   60
tgtgggttaga tggggacagg agtttttctc ccttgccctt ctggggatgg agaagggcta  120
aaccaagncc atgttgtctg gagaggtgca cccaggggtg aaggggtctg agaggccttc  180
cacctaccct cagagagcct gggttectca ggggctcagt ggggcagcac tttttgttat  240
tgtcgtgata agttcgtagc atta                                           264

<210>      84
<211>      60
<212>      DNA
<213>      Rattus norvegicus

<400>      84

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gatctcccag gactcaagac accagttggc agaggaagag cctggcttcg gttggcatta 50

<210> 85  
 <211> 136  
 <212> DNA  
 <213> Fattus norvegicus

<400> 85

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tagecctggc tgtcttggaa ctctgtagac tgggctggct tctgactcag agctctgcct 120

gctctctgtg ggatta 136

<210> 85  
 <211> 85  
 <212> DNA  
 <213> Fattus norvegicus

<400> 85

gactcaagggt atgaagacgc agagtaaacc ctcaattatc aaacggaaaa agatgggcag 60

ctaagatgca tataaagggg agcta 85

<210> 87  
 <211> 145  
 <212> DNA  
 <213> Fattus norvegicus

<400> 87

gactcaaaaga tttctaactt ggctcccttg ggcattctc gaaggattat caagaacaca 60

acctccgtg gcttcttctt ccccaagggc accgatgtgt tccctatatt aggttctctg 120

atgacagacc caaagttctt ccta 145

<210> 88  
 <211> 346  
 <212> DNA  
 <213> Fattus norvegicus

<400> 88

gattccagtaa attctcttca attccctgta gatttactaa gtgaccaccc atttccctgcc 60

ctcactaagt gacaatacct tccctgcaga cccactaata caagcttctt tcatatccta 120

ctcaggaagt gaccatgta actgagcct tctgactgac tgccgactg tcttgtcaa 180

ttgccactct catgtccct cctctctca ctgccacact cctccatcag catgtagaga 240

gtgtcttttt caactttggg ctttcttttt gtggacaaca tttctgcaaa agagcaaggg 300

tctggaactt gccctggcct ctgaccctg gatgtgtgtg ctgcta 346

<210> 89  
 <211> 205  
 <212> DNA  
 <213> Fattus norvegicus

<400> 89

gattccagagt tcaaggtcag ccttggatac atatgcagtt ccagaccaac ctgggatata 60

ggagaccaca tctcaaaaaa acaaaccaac cctgcectcc agtaaccgtc caggagagtg 120  
 tgggtggtgca ggetgagcgc ctctataccc agcctctgag aactttgtcc tctcggaac 180  
 ttgatagcct gcgggttggtt ggcta 205

<210> 90  
 <211> 211  
 <212> DNA  
 <213> Rattus norvegicus

<400> 90  
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 acctgtatca gagagaattc tggggggcct cgaggcacc tacactccat gctccagttt 120  
 ttaggcgcgc ccacctcacc cccatctctt tagtcttacc tgaggttggt tgacagcctg 180  
 cctatgtttt ctctgttgtc ttcctaccct a 211

<210> 91  
 <211> 166  
 <212> DNA  
 <213> Rattus norvegicus

<400> 91  
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 cgtgtggcgt gtagggtatcg gattagtcag ccttagttta cgtctcggca gatgtgggtg 120  
 attgatgaaa atgctgttat ggtatcagac gtgtagtgtt ttgcta 166

<210> 92  
 <211> 148  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(148)  
 <223> unsure at all n locations

<400> 92  
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 tgaggtttcc tcattgcacg cgatagggtg atcatgattt cccactaac tcattttctg 120  
 gctggcctct ttatanagc tcgcccta 148

<210> 93  
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 <212> DNA  
 <213> Rattus norvegicus

<400> 93  
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<210> 94  
 <211> 43  
 <212> DNA  
 <213> Rattus norvegicus

<400> 94  
 gatcatttct ttttagcagtt gaaacagctg gccattgtaa cta 43

<210> 95  
 <211> 128  
 <212> DNA  
 <213> Rattus norvegicus

<400> 95  
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 cactgtgaat agaccaagga aacaggcttc tggccctgag cgcaccatc ccatcaccgg 120  
 tgaagagaag actgtgtgca ctgcagcccc taagaagtag attcccttcc ctcggttgcac 180  
 ttttaagac aggaagttt cccatcagcg aatgaacatc tgtgacta 228

<210> 96  
 <211> 103  
 <212> DNA  
 <213> Rattus norvegicus

<400> 96  
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<210> 97  
 <211> 343  
 <212> DNA  
 <213> Rattus norvegicus

<400> 97  
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 tcccagccc aggtctcgag ggtcccatca gtgtgatga gtctggcctt tgagcttttc 180  
 tgaataatc caaatgttc taaagcctgg agccccgga aactgtgagc taaggagaca 240  
 tagencaaaa tcataaatga gttgcgggga gaggtctgga acagtgtgca agaaatacag 300  
 gtcaggggtt cgggatttag ctacagcgta gagcgcttgc cta 343

<210> 98  
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 <213> Rattus norvegicus

<400> 98  
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<210> 99  
 <211> 48  
 <212> DNA  
 <213> Rattus norvegicus

<400> 99  
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<210> 100  
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 <213> *Fattus norvegicus*  
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 cyatcatacc ta 72

<210> 101  
 <211> 200  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 101  
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 aactcaaac accctgtatt catctaaggg tctgggagag tctgggggtgt tctggggctg 120  
 ttcgttatct tttgcctcc atgacgcagt gagggcagcg cggcaggaga gaggcattct 180  
 tggacatgg aagctcacta 200

<210> 102  
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 <213> *Fattus norvegicus*  
 <400> 102  
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 ctgttttgag aactccggat actactttga ctctggcttg gggcgaagga agtgcacccc 120  
 agatcaaaaag caacacatttt cta 143

<210> 103  
 <211> 343  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 103  
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 gtgtgtttct cctgctcagc cctgccaca gaggcctgga ggtgtgggag tgtggcctaa 180  
 gcacagtctg ccatccttga ccgcagacct cttggacca cccccactcc ctccagacac 240  
 tggtaagaga agccttctct caacatgtcc tgtctcagg aggtgagaca gcagagtgtc 300  
 tccattcact cgatgacccc atttttgctc ttcctttggg cta 343

<210> 104  
 <211> 41  
 <212> DNA  
 <213> *Fattus norvegicus*  
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 <221> unsure  
 <222> (1)..(41)  
 <223> unsure at all n locations

<400> 104  
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<210> 105  
 <211> 67  
 <212> DNA  
 <213> Rattus norvegicus

<400> 105  
 gatecggagg aactacagag acatggatat ctacgtcaca gccaatggca ttgatgatct 60  
 tgetcta 67

<210> 106  
 <211> 192  
 <212> DNA  
 <213> Rattus norvegicus

<400> 106  
 gatecgggag cattcccttt gcagtgtcat agataccgaa gtaggcagca cggtagatga 60  
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 agatcttaac caggcagtca ccaaggcctt tgaatccct ttcagctcca gctttgccca 180  
 cttcagctgc ta 192

<210> 107  
 <211> 97  
 <212> DNA  
 <213> Rattus norvegicus

<400> 107  
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 gaggetctcc cgagactccc tgtactcacc cctgcta 97

<210> 108  
 <211> 42  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(42)  
 <223> unsure at all n locations

<400> 108  
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<210> 109  
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 <212> DNA  
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 ttgecta 67

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<210>      110
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<212>      DNA
<213>      Rattus norvegicus

<400>      110

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ggtagtgggc gaacctggag tcacagtcac tcgcctggcg gtcagccaag taccacgaag  120
tgggaagcca gctgagctgc tgaagatgtt tggatttgac aaagacgcca ttgtgcaagc  180
tgtgaagggc ctgttcacca agggcta                                     207

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<210>      111
<211>      271
<212>      DNA
<213>      Rattus norvegicus

<400>      111

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ttcacaatct ttcctgtga tgaattagca tctcagctc tctgcctata tagtagatat  120
ggaccacaaa gaagtaaata atggtgtgca atttttgtca aggaatcttt agaggccac  180
acaattccaa attctcactt catgtcagag attgaatgat tgaaaagctt tctgcagtaa  240
attatttacc ctattttctt agcatgtact a                               271

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<210>      112
<211>      415
<212>      DNA
<213>      Rattus norvegicus

<400>      112

gctctcaaa gtggctcagg aacactttgg caaaggcaaa tcaaaagact tccaactgtt   60
cggtctctct ctgggaaaag acctgctgtt taaggattct gcctttgggc tgttacgggt  120
gcccccaagg atggactaca ggctgtacct cggccacagc tatgtcactg ccattcgaaa  180
tcagcgggaa ggcgtgtgcc cggagggtc catcgacagc ggcacagtga aatggtgtgc  240
actgagtcac caagagagag ccaagtgtga tgagtggagc gtcagcagca atgggcagat  300
agagtgtgag tcagcagaga gcactgagga ctgcattgac aagattgtga atggagaagc  360
agatgccatg agcttgatg gaggtcatgc ctacatagca ggccagtgtg gacta       415

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<210>      113
<211>      152
<212>      DNA
<213>      Rattus norvegicus

<400>      113

gctctctca gaacaccagt ctgtgccaat gagggagcag catggcctct gagtgaggag   60
gtgctgggtg taagaccaca cctccagag ggaagaaagg ctctctctct ggttgtgcgc  120
tgactttctt atactgctcc ctgtgccac ta                               152

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<210>      114

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<211> 295  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 114  
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 ttatgaggca gatgctaatt gacgtggcc cccagtcct ccactgccc agccacatca 120  
 tccctgtgcg ggttgccctga tgcctgctaaa aacacagaaa tctgtgatga agttgatgac 180  
 caggcataat atctacgtcc aggcatttaa ttaccaaca gtgcctcgtg gggaggagct 240  
 cctccggatc gccccaccc cgcaccacac accgcagatg atgaacttct tccca 295

<210> 115  
 <211> 76  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 115  
 gatccttgcc tgccactatt tctgtgatct caatgttttg tttctcctg acttctgaca 60  
 ccaagctgat ttgcta 76

<210> 116  
 <211> 290  
 <212> DNA  
 <213> Rattus norvegicus  
 <220> unsure  
 <221> (1)..(290)  
 <223> unsure at all n locations  
 <400> 116  
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 cctgaagccc tgaggagag atttgaggag cactaccagc ggcatatgaa ggactgcctc 120  
 ctgaagttaa gacagagct ctgagacact tccctgtgtc tgaaattgga gtagtctcca 180  
 atttatcctt cagtttttct tgttttgaat tcagtagaag tagaagtctt ttgaagactg 240  
 atggtttaaa ttcattctgg ttttttaaac naacntttat ttaattctac 290

<210> 117  
 <211> 228  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 117  
 gatctaacca agactgatcg ctgtctccag gcccgaggat gaagaaaggc ctgagcctcc 60  
 agtgctgagt ggagacttct caccaggact ccagcatcac catttctgt ccatggagca 120  
 tcttgagaca aattctgcga tctgatttcc atctctctc acagaaaagt gcaatcccg 180  
 tctctccagc atcttcccta gttaccacag acaacacatc gagaatta 228

<210> 118  
 <211> 93  
 <212> DNA  
 <213> Rattus norvegicus

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<400>      118
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cacagtttagt cactttgtgt cacccggaat cta 93

<210>      119
<211>      145
<212>      DNA
<213>      Rattus norvegicus

<400>      119
gatctacacc acagtttcta acagtagcaa cattacagcc atgaagtagc agtgaaaata 60
acttgatgggt ggggggaatc accagaatat gaggaactgt attaaagggt cgcagcattc 120
ggaaggttga gaagccactg ggcta 145

<210>      120
<211>      34
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(34)
<223>      unsure at all n locations

<400>      120
gatctacatt ggaaggcgtn gacaactanc acta 34

<210>      121
<211>      45
<212>      DNA
<213>      Rattus norvegicus

<400>      121
gattctaggcc cctttctctc tctaaccctc tttctctctt gecta 45

<210>      122
<211>      363
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(363)
<223>      unsure at all n locations

<400>      122
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ctgatgaagt accncacatg tcacagctaa agtccaggaa gagattgacc gtgtgattgg 120
cagacatcgc agccccctgca tgcaggatag aaaacacatg ccttacacag atgccaatgat 180
tcattgaggtg ncagagattc attaaactttg tcccagacaa cctgccccat gcagtgcact 240
gtgacattaa attcaggaac tacctcatcc cgaagggaac aaaagtgtta acatcactga 300
catcagtgtc gcatgacagc aaggagttcc ccancecana gatgttttgc cnanccactt 360
cta 363

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<210> 123  
 <211> 132  
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 <213> Rattus norvegicus  
  
 <400> 123  
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 ttgtgttttt taaaaactga caggtgctac attctatct gttgggttca attctgccat 120  
 atttcattgct ta 132

<210> 124  
 <211> 89  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <400> 124  
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 agtgacgtga atgaatgctt acctggcta 89

<210> 125  
 <211> 206  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <400> 125  
 gatctcattg atcacagcct ggggtgtaggg catcttctatg tgggtctcat actgaggctg 60  
 tgggttctctg cagatcaact gctcaatttc ctcatggacc ttgggtctca catctggatg 120  
 ctctcatgagt agaaggaagc cgtagcgtag tgtggagctg actgtctcag acccagcaaa 180  
 gaagaggctt agtggtgtca tcaacta 206

<210> 126  
 <211> 71  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <400> 126  
 gatctccag atcaagtctt ctttgccatc tccatttcta gccacaacag catgagaagg 60  
 gatccgggct a 71

<210> 127  
 <211> 129  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <400> 127  
 gatctccgg ggagtgatgc tggaagaaag gcaaagccag aaactcaata aagtatgacg 60  
 tttaacgtgt gggtccagg tgcctttctta ctgtttgcca aaattgagct gcttcaagac 120  
 aagggtacta 129

<210> 128  
 <211> 247

<212> DNA  
 <213> Rattus norvegicus  
 <400> 128  
 gatctctccc gagagacaca gccagaatac agcaaataca taggcaaatg ccagcagcaa 60  
 accacccgaac tgaaaacggg acccccgttt aaggaatcag agaaaggact ggaagagctt 120  
 gaagggggtt gagaccccat atgaacaatg ccaagcaacc agagcttcca gaaactaagc 180  
 cactacccaa agactgtaaa tggactgacc ctgggctcca acctcatagg tagcaatgaa 240  
 tagctta 247

<210> 129  
 <211> 347  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 129  
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 ccaatggagt aacaagtagg ccttgctac actgggcact cacagagagg acctgtccac 120  
 attggaacct gcaggcacc tggccttctg cactgtggtt ctctctcctt cctgtccct 180  
 tctcagctt tctcagccc atctctcaa cctcaccoca gtcatgccc catagtcttc 240  
 attctccca cttcttttca tagtggctcc cttctttatt gacacctaa cacaacctca 300  
 cagtcctttt ctgtgatitg aggtctgccc tgaactcagt ctcccta 347

<210> 130  
 <211> 431  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(431)  
 <223> unsure at all n locations  
 <400> 130  
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 accgccttgg caaaagacag gacaaaaaac cggtaacttg ctgcctttga aaaggtgttg 120  
 aagagccatg gccaaagacta ccttgtaggt aacaggetga cccgggtaga catccacctg 180  
 ctggaacttc tctctatgt tgaagagttt gatgccagcc ttctgacctc ttccctctg 240  
 ctgaaggcct tcaagagcag aatcagcagc ctccccaatg tgaagaagtt cctgcagcct 300  
 ggcaytcaga gaaagcttcc cgtggatgca aaacaaatcg aagaagcang gaagattttc 360  
 aagttttagc ggagctgcac tgtccaattt ctttatgctt tgcanaaaat gagaagcaat 420  
 tgttgatcct a 431

<210> 131  
 <211> 180  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 131

gatctggatg aaatagtctt ccattaccct tacattcccc ctggggagaa agaggcaagt 50  
 cttgccaaaa tcaaggacaa agcaaggaac cgttactttc ctgcctttga aaagggtgtg 120  
 aagagccatg gabaagatta tctcgttggc aataggctga gcagggtga tgtttaccta 130

<210> 132  
 <211> 155  
 <212> DNA  
 <213> Rattus norvegicus

<400> 132  
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 gaagaaactg cacaaccat ctcattcctg tcttatcttt attgtattgg aagctttctt 120  
 taagttacca ttttttagag cgttggttagt gccta 136

<210> 133  
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 <212> DNA  
 <213> Rattus norvegicus

<400> 133  
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 gctcgcgaac aatgaagtat ttgactaaa tgttgaccgt acttattggg agggtaacat 120  
 gttttctaag gcttctgtgt taattcatat agacatgact catgaggaat tgctgggatg 130  
 ccatcta 137

<210> 134  
 <211> 205  
 <212> DNA  
 <213> Rattus norvegicus

<400> 134  
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 gttctgttgg gaaagggtccc agatacacac tccagagcta actctgaaac gtcaagaaat 120  
 caaagcccag aatctcgtgt aggcgatgg agactcccca aaggacacga aacagctgtt 180  
 aaagttagcg gcagtgtgtc cgagaagctg cctccagca gcctgctcat ggacagagct 240  
 gaagcagcca gctttgcaca gtcggcaggc cagcaggact gggaagtggg gtcta 295

<210> 135  
 <211> 93  
 <212> DNA  
 <213> Rattus norvegicus

<400> 135  
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 tgtcccata cctcacactt tccctccatg cta 93

<210> 136  
 <211> 156  
 <212> DNA  
 <213> Rattus norvegicus



<400> 136  
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tgggaaaagt gcagcgaatt ttaacgtatg tgatecgcca tgetgtgaaa acactattgg 120  
galacctccc ctgtgacggg attggagggtt tggcta 136

<210> 137  
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<212> DNA  
<213> Rattus norvegicus

<400> 137  
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ctgttggtcag cta 73

<210> 138  
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<212> DNA  
<213> Rattus norvegicus

<400> 138  
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ggatgaactt cacccta 137

<210> 139  
<211> 125  
<212> DNA  
<213> Rattus norvegicus

<400> 139  
gatccagggt ccagttgtca tggtgcttt gatgagcctt tcccgaaga cttgcttgag 60  
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ccta 125

<210> 140  
<211> 103  
<212> DNA  
<213> Rattus norvegicus

<400> 140  
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agccatggag aatgtagtgg tggcactat ccaataccgc cta 103

<210> 141  
<211> 172  
<212> DNA  
<213> Rattus norvegicus

<400> 141  
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gaggaaga aactggtgg cctgcctttt cctgggaagg aacagcgtc cctgagtgc 120

ccggggcccg aaaagcaaag aacccctga tgcctccgc tgagactcac ta 172

<210> 142  
 <211> 238  
 <212> DNA  
 <213> Rattus norvegicus

<400> 142

gatacgtgct gycacaccc agagcaccac ggatggggag ctgagccat atggccaagc 60  
 atgtgtggat gacagcaaag gtcagaagct actgctgcc cctctggttt agatgggttc 120  
 ccaggagccc agacttcgac tcatgggtgt ccaggggagg ctggggacaa caggggggtc 180  
 cttcccaggc ccactgctg cccacactg atctgctgt cttttctgt gctctcta 238

<210> 143  
 <211> 104  
 <212> DNA  
 <213> Rattus norvegicus

<400> 143

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 ggatgtccct ccgattatgt ccacggggat gccacattct gcta 104

<210> 144  
 <211> 178  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(178)  
 <223> unsure at all n locations

<400> 144

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 gaaggaggag cyagttcagg ccagcagana gctgaagggc cccaagatgg tccagcta 178

<210> 145  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(157)  
 <223> unsure at all n locations

<400> 145

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 ccgggatcag ctgatagaca tgaagcgct gnaggtaagc ctgaggcnch ggccccaatt 120  
 tgtctttgac taagaaaaaa ggaatangaa cactcta 157

<210> 146  
 <211> 207  
 <212> DNA

<213> Rattus norvegicus  
 <400> 146  
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 ctccgggtggc tggatcaaca gtcaggttat ccactaagggt gccagctga attaccttca 120  
 cgggagttaa atcccaatta ttgtgttttt tcattatgtg aatgttctta gctgttacat 180  
 cagctacata gacatacttc tggctca 207

<210> 147  
 <211> 453  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(453)  
 <223> unsure at all n locations  
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 accctctct gtgttccgga gcacattttg ctggggccaat acacaggtea cagagggtgg 180  
 aattcttctt atagccagga gcacagcctt gactgaaaaa ttcacgaac ttgcagtgg 240  
 tgatectget gaacagcagg ccataaggga tgttccagcc ggcggttctg tctactccag 300  
 tatggcagga cttcttgcc ttcaggttgt tccagttgat gctggagtct gatgccttca 360  
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 <400> 148

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 gacttctcac caggactcta 140

<210> 149  
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 cgggatgcgg atgatctgca gaagcgctg gcggtgtaca aggcgggggc acaggagggc 180  
 gccgagcgcg gtgtgagtgc tatccgtgag cgcctggggc cactggtgga gcagggtcgt 240  
 cagcgcacag ccaaccta 258

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 <213> Rattus norvegicus  
  
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 <213> Rattus norvegicus  
  
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 acta 64  
  
 <210> 152  
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 <213> Rattus norvegicus  
  
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 <211> 132  
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 tctggtctcc ta 132  
  
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 <213> Rattus norvegicus  
  
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 tggggtaagc aactacatgt gtattcccag tccctgtcta aagatagaga cgtcattgtg 120  
 ccatagctgc tcaagctcct gtgagctgcc ttctcccat cctaagtcct cctcagcttt 180  
 cctaaacacc tcattccact ccttctctcc taagccta 218  
  
 <210> 155  
 <211> 124

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(124)
<223>      unsure at all n locations

<400>      155

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tactgggttc gttcagaatg aaaattgctc tcagcagncc tcattgatat ttgtgcctcc  120
acta                                                                    124

<210>      156
<211>      218
<212>      DNA
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<400>      156

gatctccccc agcagcagct ccaccacaat cagaagcttg tgcaccgtct gtttgaagcc   60
aactgctgtg tgctgtggtg cctttogaag ggcattggtc atcgttctcc gggettcaga  120
gtaactcagt tggatagcct tgattcgccc tgtgtagtag aggtacctgg cccactcatt  180
gtgtgttagc tgttcgggga acacagactt ggacacta                            218

<210>      157
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<212>      DNA
<213>      Rattus norvegicus

<400>      157

gatctcattt taaccgtaa ccagtctata tgtgtttgga cta                        43

<210>      158
<211>      357
<212>      DNA
<213>      Rattus norvegicus

<400>      158

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aaggcagccc gggttagcac tgtgctgact gcccagaagg atttattttg gaaaggtgac  180
aaggactgca ctggcaatth ctgtttgttc cggctctcca ccaaggacct tctgttcaga  240
gatgacacca agtgtttgac taaacttcca gaaggtacca catatgaaga gtacttagga  300
gcagagtact tgcaagctgt tggaacata aggaagtgtt caacctcagc actecta      357

<210>      159
<211>      47
<212>      DNA
<213>      Rattus norvegicus

<400>      159

gatcttggcc ttcacgttct cgatgggtgc actgggetcc acctcta                    47

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 <213> *Rattus norvegicus*  
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 <210> 161  
 <211> 113  
 <212> DNA  
 <213> *Rattus norvegicus*  
 <400> 161  
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 gaaggacagt gttgcacca ctgatgagga ggggcagcac ctacaggagg ttggtctctt 120  
 ccacctgggc ggttttgtca atgtgttctg ccattgctcc cta 163  
  
 <210> 162  
 <211> 180  
 <212> DNA  
 <213> *Rattus norvegicus*  
 <400> 162  
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 acacaggaga ctgcaggct gtctcaggcc atgatggctt ttactactga cctgttctcc 120  
 ctggtgggac aacatccac cagctccaac cttgtcctgt cacccttag tglggcccta 180  
  
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 <211> 179  
 <212> DNA  
 <213> *Rattus norvegicus*  
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 ctgaagaaac ttcttactg tggggagggt gctgactctg gttctcaggc ccttcagcag 120  
 agggaaggtg gtc aaagcgc tgggggtccag ctctccaca tggtagagaa cttgaacta 179  
  
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 <213> *Rattus norvegicus*  
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 tggctaagat caaaaactca ggtgacagca aatgctggaa aggatgtgga gaaagaggaa 180  
 cactctcaca tttttgggtg gattacagaa tggttta 217  
  
 <210> 165

<211> 197  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 165  
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 tcatctttgc cagaggctac agctttgcct ttccttttct tgaggactct gtcaaagtag 120  
 tccaaaacaa ggtctccttg tataaaaagg tctttcccc taacctggaa aaaccaactc 180  
 tggcaatcat cgggttta 197

<210> 166  
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 <212> DNA  
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 <400> 166  
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 cagatccctg tcccaattgc cccctccact tgggtaccac ctaaccttg gacatctgct 120  
 tcatgtagta cttagctatat cctttctcac tgaggcctaa ccaggcagtc ttggtaagga 180  
 tgagatccaa tcttaggaac tatagactga gacaacccca gttctgttgg gacagctaa 240  
 agatggcagc acatccagtg gtcttttctg gtatacaacc ataactggg tatatagcca 300  
 tctccctggc cttctcttgg catttacaag gccaggggtg taagcatgct aataaggat 360  
 ctcaacccc acatacttc agaaggacaa gtttacagcc actgcctgtt ttgtactta 419

<210> 167  
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 <212> DNA  
 <213> Rattus norvegicus  
 <400> 167  
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 catcgatccc aactgggtcg gaacctccc acgcatgact caattcagag ctgtttccca 120  
 ggaggctggg gggggatgca gacagattcc aacacctta 159

<210> 168  
 <211> 110  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 168  
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 aacctttaga ataattgggtt ttgttggttg aagaagtctt tgtctgctta 110

<210> 169  
 <211> 149  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 169  
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tgggtggaaga atactcccttg gtgtgcaaac tcatcagcac tatccaagtc agcatctgca 120  
aacacaatgc aagggctctt tcccctaagg tccaggggtga cctctctcag attgcttttc 180  
cctgcagctt ctttgatta 199

<210> 170  
<211> 380  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(380)  
<223> unsure at all n locations

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ccaccacctg tgggtgctcag gagcccagcc tagaaagagy actccgacac agcggggcagn 180  
ggctccacag acggatctat gaggaataa cggggggcagg cangcaggca ggcgaccccc 240  
tgacactctg gtggccgtg tatctgagcc cttttgggaa ggcttataga caacaggtgg 300  
agcccatagc ctgggcatag ggagcctggg aagggctcag gagctcagga cactccagg 360  
ctctctagca ccaccgcta 380

<210> 171  
<211> 366  
<212> DNA  
<213> Rattus norvegicus

<400> 171

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tttgacgcaa gtactcggta cgaggtacc ccacattgct gcttttcogg gggaggtgag 120  
aaagtgggtg agcacaatgg aggcagagac ctgcactctc tacacagctt tgttctgcgc 180  
caggcaaaagg atgaactcta agaactctgg tgaagccgtc atccaccctg gccttatgca 240  
ccccgtgcac aggagtgacc tcacatggac atgcgtatct tcaactgtgt tagtcagaac 300  
gctguatgta ttgagcttgt gttgcttgt gtgtgccctt tgagccacca cacactacgg 360  
acctta 366

<210> 172  
<211> 339  
<212> DNA  
<213> Rattus norvegicus

<400> 172

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agatatggaa gcagctacag ggcaggaggt cgagctatgt ttagaatgca tcgaatgggc 120  
caaatcagag aaaagaacct tcttacgcca agcattggag gcaaggtctg tgtctttgta 180  
ttttgatacc aagaggtccc aggaagcatt acatttgggt tctcagctgc ttcgggagtt 240  
gaaaaagatg gatgataaag ctcttttgggt gaagtacagc ttttagaaag caaaacttac 300



catgctctga gtaatctgcc gaaagcccgga gctgcctta 339

<210> 173  
<211> 290  
<212> DNA  
<213> Rattus norvegicus

<400> 173

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gtgtcgtgga ggcgcgatgt ttgcaccaac caaaacctgg cgtcgttggc atcgcagagt 120  
gaacacaact cagaaacgat atgccatctg ttctgccttg gctgcctcgg ccttaccage 180  
tttgggtgatg tctaaaggtc atcgtgttga ggaagtctct gaactgcctt tgggtggtga 240  
agataaagtt gaaagttata agaagaccga ggaggtgtt cagctgctta 290

<210> 174  
<211> 199  
<212> DNA  
<213> Rattus norvegicus

<400> 174

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gacttgactc caccacagct tccaccttgg ccgggaactgc tctacctgt gagccaaaca 120  
ctttagggtg aagtaggtac actttgtgat gtcactgacc tagtgtacc tttctttttt 180  
catatctata ctgacctta 199

<210> 175  
<211> 165  
<212> DNA  
<213> Rattus norvegicus

<400> 175

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atcttctcac ggcacccctc atctcacaag tgtccaggac catggggaca ttgcattcaa 120  
agcacggtac ctgctttcta attgatggtc aaggttatat gctta 165

<210> 176  
<211> 46  
<212> DNA  
<213> Rattus norvegicus

<400> 176

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<210> 177  
<211> 39  
<212> DNA  
<213> Rattus norvegicus

<400> 177

aattccgaat gtggattgtg attttctgc ttccactta 39

<210> 178  
 <211> 283  
 <212> DNA  
 <213> Rattus norvegicus  
  
 <400> 178  
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 gtaactaccg tgtatactac agcgctggtc ccaaggacga ggaccaggac tatattgtgg 120  
 aacattccat tgccatctac ttgctcaacc cagatgggtt ctteactgat tactatggtc 180  
 gtagcaggtc agcagagcag atcgtagaga gtgtactgac ggacacatagc tgccttccat 240  
 aacatactgc cctgaactgt gtactgcta ggcctgtgca tta 283

<210> 179  
 <211> 223  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
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 <222> (1)..(223)  
 <223> unsure at all n locations

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 cactcggtcg tacaagtgga tccccagaa tgacnttctt ggtaacena aaaaccnaaa 120  
 gttttgttag ctcatggtgg aacaaatggc atctatgagg caatctacca tggcattcct 180  
 attgttggtg ttccttgtt tgcagatcaa ccggataaca tta 223

<210> 180  
 <211> 182  
 <212> DNA  
 <213> Rattus norvegicus

<400> 180  
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 cctttcttgg ttttgcttgc tttttctgat tttataccaa ctgtgtggac taagatgcac 180  
 ta 182

<210> 181  
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 <212> DNA  
 <213> Rattus norvegicus

<400> 181  
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 ttgtgttact ccccatgtgt tagctggatc atcctcatgt tcttctccca cactgctctc 120  
 ctccactctt cctcattcgt gccatacagt cttctgtgtg tggacttcca ctggtgccac 180  
 tgtgcatta 189

<210> 182

<211> 160  
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 agtgacagct agtgtgtgcg cgcgtctctt cgtctctctt ccttctcctt ctctctctct 120  
 ctattccttc cctctctctt ctctgcccct tcttggttta 150

<210> 183  
 <211> 287  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(287)  
 <223> unsure at all n locations  
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 gacaaagga gacaagaaga ccttcgatga atgcgtggct gaggcggctc agactgtgct 180  
 ccagagaagc tctggcttca gatccgctt tctgtggcc actagctcag aatgctggaa 240  
 tgttgggaagc agatggggcg tggatcaagc taagtacac ctggta 287

<210> 184  
 <211> 135  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 184  
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 cataatctag agtta 135

<210> 185  
 <211> 79  
 <212> DNA  
 <213> Rattus norvegicus  
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 tggctggcca ggtgtgtta 79

<210> 186  
 <211> 413  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 186  
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 ggggagctat gcgaggaaaa cttattgttc aaagtctat tgaccccaag aacataacca 120

aatacgaact cttctatcaa gacattttage actcgtctgt gttggagaga agagaggac 180  
 aggctgaagc agaactgaa ctcagagagc ctgtggtctg gagtcctca gagacatgt 240  
 cactgcctga gaaagaggt ttcattaggtc tgtaataaac ggcctctctg cagaagccc 300  
 agtgcctcca gaatggagat gctgagcgc ccattctctg agagcctcag agcagtgcg 360  
 gagtgaacgg tggcattgta acggaccctt tatcttgact gtctttcccc tta 413

<210> 187  
 <211> 362  
 <212> DNA  
 <213> Fattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(362)  
 <223> unsure at all n locations  
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 gcttttccag cttcccttcc gagctactgc atgccccaga aaagtgggtg aaggctcaagt 120  
 ccccaaacct atctctatt cctacatgga acgtgggggc ctttttctg cctttgaaga 180  
 ggcctgaagt ctggcctagg acatccgcaa gttcgggtcc ctggtctgag tgcagtatg 240  
 acactggata caaactgtgg ctttagcagc agccttggtt cctcccaagt cacacttatg 300  
 gaagatgacc cttttctnag gaataagttt gttcctgac cacactcgag gacctagact 360  
 ta 362

<210> 188  
 <211> 74  
 <212> DNA  
 <213> Fattus norvegicus  
 <400> 188

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 ttattctagc cta 74

<210> 189  
 <211> 267  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
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 <222> (1)..(267)  
 <223> unsure at all n locations  
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 ctgggttgga ggagctgtgg agccacggg ctctgctgct gttgttcac tggctcgcc 180  
 tgcaggtggc gctctatttg ctgctgcac gcaaggtggc cgaggggctg ganctgaagg 240  
 acaagagtcg cctgcgtac cctatta 267

<210> 190  
 <211> 192  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 193  
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 atttatgggc tgtgtagcta tgggaacctt gtacttctg ccaattttgc tctgaaactc 180  
 aaactgcctt ta 192

<210> 191  
 <211> 83  
 <212> DNA  
 <213> *Fattus norvegicus*  
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 ctaggagttt attggaaggt tta 83

<210> 192  
 <211> 56  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 192  
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<210> 193  
 <211> 42  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 193  
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<210> 194  
 <211> 133  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 194  
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 ttgtggtaaa tgggtatctt catatgttct tgacttgata tgaaatattt tactataaac 120  
 ttttcatatg tta 133

<210> 195  
 <211> 79  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 195  
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tgta	65
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gta	64
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<210> 200 <211> 218 <212> DNA <213> Rattus norvegicus <400> 200	
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ttcaagagct ttaggaagcg actaacagca gagtgtctgg gaacatacga atcagtctct	180
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<213>      Rattus norvegicus

<220>
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<222>      (1)..(151)
<223>      unsure at all n locations

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atttttatta caattcaatt tttttccttt a                                     151

<210>      102
<211>      63
<212>      DNA
<213>      Rattus norvegicus

<400>      102
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tta                                                         63

<210>      203
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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(221)
<223>      unsure at all n locations

<400>      203
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gggacagtga gtctgtgtgg gtgtttggac acagccacag gacaggcctc ctgacagtgc   180
tgcagatcag acggcaaaag aaagcagaac tgtctggttt a                       221

<210>      204
<211>      178
<212>      DNA
<213>      Rattus norvegicus

<400>      204
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cggatattctg gtctccagcc tcatgtggtg gttcttgttg ccactgtcag ggtcttta   178

<210>      205
<211>      233
<212>      DNA
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<400>      205
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cgaagacacc aagttcaacc accgtccatc cagaaatgag aagaacaata ccttagagca 120  
aagtcateca caccacgtac acactccgct gctaacctga aatgcatgaa cagaaaccca 130  
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<210> 206  
<211> 74  
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<213> Rattus norvegicus

<220>  
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<223> unsure at all n locations

<400> 206

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gactcattac tttta 74

<210> 207  
<211> 54  
<212> DNA  
<213> Rattus norvegicus

<400> 207

aattctccag ataatggta ttaagacaat tctttccagc atgctcaagg gtta 54

<210> 208  
<211> 240  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(240)  
<223> unsure at all n locations

<400> 208

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tcaaaactctt ctaacattgc aatatgctaa tattgttaga ctgctacaga tgcactgaaa 120  
cacagaatat gatcttttaa ggggccaaaa atgctacggg gtgaaaatat cacaatgact 180  
gtcttttncct taaaaaagtc acataaaatg cagtttagaa caaggngaaa cataggtcta 240

<210> 209  
<211> 147  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(147)  
<223> unsure at all n locations

<400> 209

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tataggtaag atcataacat ctatcta 147



<210> 210  
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 <212> DNA  
 <213> Rattus norvegicus  
  
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 <221> unsure  
 <222> (1)..(67)  
 <223> unsure at all n locations  
  
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 tacteta 67  
  
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 <211> 41  
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 <400> 211  
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 <210> 212  
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 <212> DNA  
 <213> Rattus norvegicus  
  
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 <222> (1)..(99)  
 <223> unsure at all n locations  
  
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 <211> 141  
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 <222> (1)..(141)  
 <223> unsure at all n locations  
  
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 ctctcggtg ttctccctct a 141  
  
 <210> 214  
 <211> 134  
 <212> DNA  
 <213> Rattus norvegicus  
  
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 ctcgtgctaa tcta 134

<210> 215  
 <211> 121  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(121)  
 <223> unsure at all n locations

<400> 215

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 a 121

<210> 216  
 <211> 254  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(254)  
 <223> unsure at all n locations

<400> 216

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 tgagagactc aattgcctcg tgagtgtggt ggagggagga aaaaggggtc atacctgctt 180  
 cattaggaag agcagaacta tggtaagan cacagtggac tggatgttac actcantnnn 240  
 ccacttaata gcta 254

<210> 217  
 <211> 107  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(107)  
 <223> unsure at all n locations

<400> 217

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<210> 218  
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<400> 218

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37

<210> 219  
 <211> 291  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(291)  
 <223> unsure at all n locations

<400> 219

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 tgcctcgtgg tcttgggggc ctctctctgt ggcaaacccg atgtgcctgt ctacgatggc 180  
 tcttgggtgg agtggtacat gcgtgcccaa ccggagcacc tcatntntca gggccggggg 240  
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<210> 220  
 <211> 289  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(289)  
 <223> unsure at all n locations

<400> 220

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 accactctat actcctttc atgaggaaaag ggatgcctgg agactggaan aactacttta 180  
 ctgtggcaca aagtgaggat ttgatgaag actaccggag gaagatggca gggagcaata 240  
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<210> 221  
 <211> 91  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(91)  
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<400> 221

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<210> 222  
 <211> 166  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(166)  
 <223> unsure at all n locations  
  
 <400> 222  
  
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 ggtccagag gctccgact ccacagagan cagctcagtn ttctgtcttta ctgcgctaca 120  
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<210> 223  
 <211> 112  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(112)  
 <223> unsure at all n locations  
  
 <400> 223  
  
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<210> 224  
 <211> 65  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(65)  
 <223> unsure at all n locations  
  
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 gtcta 65

<210> 225  
 <211> 44  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(44)  
 <223> unsure at all n locations  
  
 <400> 225

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<210> 226  
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 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(105)  
 <223> unsure at all n locations

<400> 226  
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cctctgtttg ccatcaenga cacagaaatg ancaagaatg tgcta 105

<210> 227  
<211> 110  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(110)  
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<400> 227  
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aaagaaaagca aaaggggttg gatttagntc agtggnagag cgcttgccca 110

<210> 228  
<211> 392  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(392)  
<223> unsure at all n locations

<400> 228  
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atcccantgt ccangnatga nccagcaacc ctggaaacct acactcccca gagaaaaacc 180  
anaaattgaa agaanancaa actaaaagga ngcnaaacac ataaagcatc antcacagtt 240  
tgnnccagcc tngatctgac ntcgaanaag cctgaagaca gatgtgcccc ncttcanaca 300  
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caanncaang nnatgagnnc ccaacacac ta 392

<210> 229  
<211> 81  
<212> DNA  
<213> Rattus norvegicus

<400> 229  
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<210> 230  
<211> 203  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(203)

<223>	unsure at all n locations	
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gaagctctcta	aagtctacac ttgaatggat atatcacatc tgttggatga cectgcaatt	180
aagggtgaag	tgcaccatgt cta	203
<210>	231	
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<400>	231	
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atgtctgtctc	ttaaactgtg tggegttctt gggactgtct tccagctcta	110
<210>	232	
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<212>	DNA	
<213>	Rattus norvegicus	
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<221>	(1)..(252)	
<223>	unsure at all n locations	
<400>	232	
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aagaangtta	gagcacagta catactaccc ctgccctgct cccaccaccc gctctccaca	120
acctccccc	atgtgcaact gacactcttc cccagtcgat gctctacct acctttcagc	180
ccagtcatt	cgtagtgtcc atcttgtnaa gccctgttgt gccacacagt ntaacnngcc	240
ccctgcagc	ta	252
<210>	233	
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<221>	(1)..(120)	
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<210>	234	
<211>	47	
<212>	DNA	
<213>	Rattus norvegicus	
<400>	234	

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<210> 235  
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 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(121)  
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<400> 135

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 a 121

<210> 236  
 <211> 65  
 <212> DNA  
 <213> Rattus norvegicus

<400> 236

aattcatcca caccaactgg acatgccac ggtggcagtg tgctgtctc ttcatacaat 60  
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<210> 237  
 <211> 49  
 <212> DNA  
 <213> Rattus norvegicus

<400> 237

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<210> 238  
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 <212> DNA  
 <213> Rattus norvegicus

<400> 238

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<210> 239  
 <211> 74  
 <212> DNA  
 <213> Rattus norvegicus

<400> 239

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 taaaacttcc ccta 74

<210> 240  
 <211> 142  
 <212> DNA  
 <213> Rattus norvegicus

<220>

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 <222>        (1)..(142)  
 <223>        unsure at all n locations  
  
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 gttaggacca caactctggt aggtgggttaa aaaacaagca acaagggtg gggatttagc   120  
 tcagtggtag agcgttacc ta    142

<210>        241  
 <211>        184  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        241  
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 actttggaca gactgccagc taacacccac caccctcatg ttaagacaca tctctggatc   180  
 ccta    184

<210>        242  
 <211>        71  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        242  
 aattccaag gtcaaatgcg gttagctgct gtggattcg atatggaaca tgttacctct    60  
 cctctgcct a    71

<210>        243  
 <211>        391  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        243  
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 tctataccaa ttttatcaac tctaagccc aactatcac accattctcg caatttcac   120  
 agtctttggt ggcgcctgag gaggacttaa ccagatccaa acacgaaaaa tcatagcata   180  
 ttcataaatt gccacatag gatgaataac agcaatcctt ccatacaacc ctaacttaac   240  
 cctctaaac ttaacaattt acatctact tactgttcca atattcatca cactcataac   300  
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 aacctagca tcatcatcc tctatcact a    391

<210>        244  
 <211>        175  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        244  
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cactggctct tttccgtgta gcctctctgg gcaagtgagg gaggcattatt agtttccatt 120  
 tgcaggtgtg gaacactgag cccagaaaag gacaagaaga ctcattcagt agcta 175

<210> 245  
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 <213> Rattus norvegicus

<400> 245  
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 gattccattcc tgtctccact tgagcccccac gttcacgcag cccgactctt gggagggact 180  
 tttgtgtcca gcta 194

<210> 246  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(44)  
 <223> unsure at all n locations

<400> 246  
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<210> 247  
 <211> 198  
 <212> DNA  
 <213> Rattus norvegicus

<400> 247  
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 tgaggccagc ctgggtcta 198

<210> 248  
 <211> 332  
 <212> DNA  
 <213> Rattus norvegicus

<400> 248  
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 catcaatctc caccatgggc acttgctgga acatcaaact cccatcattc cttagcctgg 180  
 ccaggtcacc ccgagtttcc agaaattgtt cttcaaactc tactccagct gcagccagga 240  
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<210> 249  
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 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(481)  
 <223> unsure at all n locations

<400> 249

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gtagcgcact catggtacca tgagggtggc cagtctgcag gaggcattga gtgaaggcca 180
gtgcctgggc cacttgggaa gaaagggtt acagagcccc ggagtcagag gcagttggtc 240
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ctgtcctacc gatggctgtc ctgcctact gggggcactt gaagaacaaa atgtcatttt 360
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ctaataagcc tcattacaaa aagacgtttt ctccgtctca tctggcgttt tctttggctt 480
a                                                                    481
  
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<210> 250  
 <211> 441  
 <212> DNA  
 <213> Rattus norvegicus

<400> 250

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gacacacatg tgcgtgagag gactgacaaa attgtacttg agtgacaagt tcagaacttg 180
ggcctcaggg gctcttaact cagctcttga ggctgaaatc ctctgtctca gctgttgcgt 240
tatgttcagg aacgcccaga gtctctccat aaagttatga aagatgtact taggaccctg 300
gaactctttc tcttgttggg ctatgtggc ctccgtttgg aaagtgatgt tctgcagggt 360
gatactgccc ctgacttttg ctaagaggac atcagggccc tggtcaccga ctccaccagc 420
accacatct ctgagccctt a                                                                    441
  
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<210> 251  
 <211> 193  
 <212> DNA  
 <213> Rattus norvegicus

<400> 251

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atgtttgggt gtcttggagc aaagctgcta tggagaaatg tgcagggtgc taggggatgc 120
tgtactgtct tagaggatgt aactcaactc acagggtgac tttttgatgc ctgacccaat 180
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<210> 252

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<211>      156
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(156)
<223>      unsure at all n locations

<400>      252
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aacttcaagg ngtgagtg ggtcacctgg gcaggcttga tcaccacggt gttcccagcc 120
gccaggcagg ctgcattctt caggatacca tcatta                                156

<210>      253
<211>      101
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(101)
<223>      unsure at all n locations

<400>      253
gattcgaacc caagaggtaa aaaccttccc gcgcgaccag aagtgtccga ggctttcccg  60
gaggcgggtgg gacttacttt cccaagaana aagcaggatt a                                101

<210>      254
<211>      228
<212>      DNA
<213>      Rattus norvegicus

<400>      254
gattcgcacc gttttgaagg aggaattcta ccacagctat ttgcccggtgt gccgcagccc  60
acatcagggg agtaaatcct tcttcacccg tgtgattgat aacattttct tgttcaatac 120
gagtugccag gtagagcacc tctccctgag ctgccaaactg gtgaacagac agagaatttg 180
ctaacagagg tgtgggtggag acctcgtttc cctgtgtctt gttgggta                228

<210>      255
<211>      177
<212>      DNA
<213>      Rattus norvegicus

<400>      255
gattcttaag tggtagctct ttaggtagtg gacttttatt tactcccaag ggcattcatt  60
caaactctcc cctctttggt gaaagttcag attccacagc aggtgctgat agtacaacca 120
tgtccatttc ataacaatat gtaggatgtt tgattctcaa gttggtgaat gctgtta    177

<210>      256
<211>      447
<212>      DNA
<213>      Rattus norvegicus

<400>      256

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gatcttgggg tgtgggtagg gatttccagg gtgaaggtag attatttatt aggggtgggaa 60  
tgtttcattt acatgaagag gaatatgcca agaacctgct ggacaagttc atatcctgaa 120  
agaggaagtt gaatctgtaa tctgggcata agttatgtga ctttcctcag aggatttctg 130  
gggttacagg caggagtgge tgattggtea taacagtacc taattatcat atgggtgggaa 240  
ggactgagtg ggatgtatgt gctgaacctt gtggcaactg caggaagctt tgtgcaaggc 300  
cattctctag ataaggtcag gcacttgtgc ttagaacct ttccagataa gattggggcaa 360  
aggagaggaa accccactga gaaagggagt cttccatttt gcaccagggt cagagagctt 420  
atctagacat ggtcgacttc aacctta 447

<210> 257  
<211> 350  
<212> DNA  
<213> Rattus norvegicus  
<400> 257

gatctaaaat acctcgggaa tacatgtcaa tcagggetct ctcttctatg tccttcccat 60  
agaggtcata ttgggtggcg atgtagttga gaatggetct ggtctgtgcc agcttccatc 120  
cgtcaatctc caccatgggc acttgggtcaa acatcaaatt cccgtctttc tttagctttt 130  
ccaagtcttc tggactctgt ataaaattct cttcaaactc cactcctgct gcagccagga 240  
gccacgggat gcactccatt ctgccccggg cattgaagta gtgaageact ggettcaccag 300  
acatagcagc aactgtgctt tcaactgtct gcgagaatcg tggcttctta 350

<210> 258  
<211> 355  
<212> DNA  
<213> Rattus norvegicus  
<400> 258

gatcttcacc attgggggttc ccagttcttg caaagttggc ccagtacttc atcaccctcc 60  
cttccagcag ctctctctcc tcagttaggt caaaggtcat gcccacaag taggagccaa 120  
agacaaaagag aatgtcatca ccattggtctg cctta 155

<210> 259  
<211> 37  
<212> DNA  
<213> Rattus norvegicus  
<400> 259

gatccgtacc ctaggtcaga gctgtgatct ctgctta 37

<210> 260  
<211> 40  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(40)  
<223> unsure at all n locations  
<400> 260

gatactggng atcagtgtgg ggcacacac caatggggtta 40

<210> 251  
<211> 224  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> 10..(224)  
<223> unsure at all n locations

<400> 251

gatactatgg gatactgtgt gactagact agccagcata nggagctcca ggttcagtga 60  
gaagacttgt cccaaaaata agaggggaaa agcaaatgag gttgtcacia atgtgtactc 120  
gtcatacaaa ggcacccat gcaaatgtat acacacacac actcacacac tcacacacac 180  
acacacacac acanacanac acacacacac nnnnataccc atta 224

<210> 252  
<211> 31  
<212> DNA  
<213> Rattus norvegicus

<400> 252

gatactgaaa agactgttcc ctccatgatt a 31

<210> 253  
<211> 53  
<212> DNA  
<213> Rattus norvegicus

<400> 253

gatactcgaa ctaaagctg gggcgccac ctccgaatcc caattttctaa tta 53

<210> 254  
<211> 63  
<212> DNA  
<213> Rattus norvegicus

<400> 254

gatactaaact cattagtgt aacgaccctc tccagcgtcc ctgcgcccat ctttctgtcc 60  
tta 63

<210> 255  
<211> 105  
<212> DNA  
<213> Rattus norvegicus

<400> 255

gataclattg aggcgagcag ggaactggct ggacaaggac acacttaaaa cccgattttg 60  
ttccaaatcc tgggaaacat agacatttaa ctctgaagat gcta 105

<210> 256  
<211> 66  
<212> DNA



aattcacaag gaaggagctt agaacagaca tctatttctt actgattggt a 51

<210> 272  
 <211> 36  
 <212> DNA  
 <213> Fattus norvegicus

<400> 272

aattctacag aaccgtgttt atgatacagc cgttta 36

<210> 273  
 <211> 36  
 <212> DNA  
 <213> Fattus norvegicus

<400> 273

aattcagcct taggaaaaaa taaaattgct gcctta 36

<210> 274  
 <211> 67  
 <212> DNA  
 <213> Fattus norvegicus

<400> 274

gattccacttt tattaggaac aaatgcaatc tcaaatacgt acaattaggc ttcaagagtt 60

gattatta 67

<210> 275  
 <211> 287  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(287)  
 <223> unsure at all n locations

<400> 275

ggcaatgaac cactgtagcg gggctttgca ttgctggctc tacctacagc tattactggt 60

cattggaaga ccttagagtc agaattctct tgtgtaagag cctgaatgn tgtgaccaac 120

cccagtgctc acagcatctt tgcagctggt aatctcactg ttctcgttcc tattgaagaa 180

attactggcc cagaaatgcc ttggtgtgt ttggcagact ttaaggcaca tgcgcaaaag 240

cagctgtcta agacctctg ggacttattg aaggagaagc tgacgac 287

<210> 276  
 <211> 260  
 <212> DNA  
 <213> Fattus norvegicus

<400> 276

ggctccagct ggaaggttga atattgagtg tcttgggagg tcacattgct gtcagacatg 60

gctgctggac atggctcaga acacggacat ggtcatggta aaatggaact tccagattac 120

agacagtgga aaattgaagg gacgccatta gaagcaatgc agaagaagct tgctgcacga 180

aggctgaggg atccatgggc tcgcaatgag gcttggagat acatgggagg cttgcagaca 240  
 atatcaactt cagcagcgta 250

<210> 277  
 <211> 299  
 <212> DNA  
 <213> Rattus norvegicus

<400> 277  
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 ctgaaggaga tggcccagtc gatcttcatg gcaggcatac tggttggagg acctgtgatt 120  
 cgagaactgt cagacagggt tggccgcaag cctatctga cctggagtta tctcatgttg 180  
 gcagccagcg gctctggtgc tgccttcagt cccagcctcc ctgtctatat gatcttccga 240  
 ttctgtgtg gctgcagcat ctggggcatt tctctgagca ccgttatctt gaatgtgga 299

<210> 278  
 <211> 139  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(139)  
 <223> unsure at all n locations

<400> 278  
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 cgtgtgtgta cccctgcgat ttccccaaat gcgggaaact cgactgcata atttgtggta 120  
 gtgggggact gcgttcgag 139

<210> 279  
 <211> 328  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(328)  
 <223> unsure at all n locations

<400> 279  
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 gctgggggaa gattggccat ggtggtgaat atggcgagga ggccctacag aggatgttcg 120  
 ctgccttccc caccaccaag acctacttct ctacattga tgtaagcccc ggctctgccc 180  
 aggtcaagga tcacggcaag aaggttgctg atgccttggc caaagctgca gaccacgtcg 240  
 aagaactgac tgggtgccctg tccactctga ggcactgcat gccacaaact gcgtgtggat 300  
 cctgtcattt cagtctctga gccatgct 328

<210> 280  
 <211> 312  
 <212> DNA  
 <213> Rattus norvegicus



<400> 230  
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 aaaaaaacct gtaactgtcc ttttctgcg accatgtctt ccatcaagat tgaatgtgtt 120  
 ttaaggggaga actacaggtg tggggagtcc cctgtgtggg aggaggcatc aaagtgtctg 180  
 ctgtttgtag acatcccttc aaagactgtc tgccgatggg attcgatcag caatcgagtg 240  
 cagcaggttg gtgtagatgc cccagtcagt tcagtggcat tcgacagtca ggaggctatg 300  
 ttgccaccat gg 312

<210> 231  
 <211> 239  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(289)  
 <223> unsure at all n locations

<400> 231  
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 cattctccct agcctgcttc tcttgccccg naacgcgggg ngcaggtttg ctctaaaaa 120  
 ctctgtgcat ctctgatgat aaggaccaac agctgggggt gtagctcagg gcagagtctt 180  
 gcttggnaaag ctcggatgcn ttgaggcctt gaccaccenc agcacanana naaaatgaag 240  
 gaagacccaa gmaccttctt ggaagacctc atccccaaan aagcaagtg 289

<210> 232  
 <211> 250  
 <212> DNA  
 <213> Rattus norvegicus

<400> 232  
 actgactgta ctggtcagga ggtcacagat ccagccaaat gcaacctgct ggcagaaaag 60  
 caatatggct tctgcaaggc gactctcctc cacagacttg gtggggaaga ggtttcagtg 120  
 gcttgccctt gtgccccac cagctggccc acctgaatcc gtggtggtag gacccgtggc 180  
 agttctctctt ggaacttcag accaccgaac ccaccatgac ctacggcatg ccttctctcc 240  
 tgtggtctct 250

<210> 283  
 <211> 285  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(285)  
 <223> unsure at all n locations

<400> 283  
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 tgcannaanc ggtcncaaaa gattcnaann caagatggna gcccnacg aacaggnat 120

tgtgaatgtn ttaaggaag aacaggtnc ccanacaan atnaaagttg ttgggggtgg 180  
 tgtgntggca nggggttgtgc catcagnanc tcaangaang actgggtgat gagntgcccc 240  
 ttgttgatgn cacacaagan aactaaach gagagangan cgatc 285

<210> 284  
 <211> 286  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(266)  
 <223> unsure at all n locations

<400> 284

gacctgtnt caggagcca acagctagac tggteccagt cagacgnagg aaacctggnc 60  
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 ctgttctga ccttctgtgg gttagggttg tacagccctc ctatggccaa gatagaatgt 180  
 acaacgggtt ccttagacag catgtggacc ctgaggggac aggcggcagg acaactactg 240  
 caacgtgatg atgcagagac ggaggt 286

<210> 285  
 <211> 280  
 <212> DNA  
 <213> Rattus norvegicus

<400> 285

glagctttcc ctttttctg gcacagaagt ctgtccatct gcaagcgctt tggaacacag 60  
 actgectgga gccaccttcc ttggggagac cttctgctt cagctgtcgt cctgtgtcgt 120  
 ctttactaa agtctctgac gtcagattaa gcaagcagtg atgggttaca ttagagacaa 180  
 gcgcagaga taaggcctgt tctgtttctg cagataatga tgagttttaa ttaccactg 240  
 gttgtatgg 280

<210> 286  
 <211> 113  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(118)  
 <223> unsure at all n locations

<400> 286

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 cennncaat agtggagtga gcacgtgcc cccacgtagc ccaaanactc cccaggc 118

<210> 287  
 <211> 262  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure

<222> (1)..(262)  
 <223> unsure at all n locations  
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 ctccaatggg gtcacgctc caacacagag ctttgcccc gacccaagt atgtcagcag 120  
 caaagccctg cagaganaga gcagcgaagg gtctgccaag gcccctgca tctgccccat 180  
 ncattgagaa tgggaagaag gtcagctcca gcnttattca cctactacct gagcggacgg 240  
 caccaccttg ncaaatatga gc 262

<210> 288  
 <211> 282  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(282)  
 <223> unsure at all n locations

<400> 288  
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 ctngtctctg tccctttnnt tgcctcagatt ctgagctgc caatcagctc cacaaggctg 120  
 agggctgggt ttctgagaat tggctttnat gaccgggaaa aaaancntt nanccttgat 180  
 agccgtggac taccctcaata aacatcttct tcagggatcc aggcagatct tgaatcagat 240  
 gacaaagtaa ggtgtggtct cggcgccct tcgganaggt gt 282

<210> 289  
 <211> 265  
 <212> DNA  
 <213> Rattus norvegicus

<400> 289  
 catagacca ttctcagct gggatgatat taaatggctc agacggttga cctcactgcc 60  
 cattgttgta aaggggaattt tgagaggtga tgatgccag gaagctgtta aacatggtgt 120  
 ggatgggac ttagtgtcga atcatggggc acgacaactg gatggggtgc cagctactat 180  
 tgatgccctg ccagagatcg ttgaggctgt ggaagggaag gtagaagtct tcttgatgg 240  
 gggagtcagg aaaggcaccg atgtt 265

<210> 290  
 <211> 199  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(199)  
 <223> unsure at all n locations

<400> 290  
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 acaaggatgt gagatacact ctggagagat cagagacaag cacaganact gtgtcncact 120

agtgncgttg cagtctnaac atctgtggag atcnanncan tggtnanntna ctggncnegan 180  
nrgtnchnatg caaannaag 199

<210> 291  
<211> 285  
<212> IMA  
<213> Fattus norvegicus

<220>  
<221> unsure  
<222> (1)..(285)  
<223> unsure at all n locations

<400> 291

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agtgtgatct tgttcaacta cagttagtga gaagcaactc attggccagn ttctgggaga 120  
nnttgtgngg tanttaatgc agcngtatgg naacnnaata cnatttangt ttenggtgct 180  
gntantaatg gtcnatgect tetacagtgg gttgtccann nggantactt ccancgnnat 240  
aggngntgga gcntatgttc tggcgatat ganggttgcg ngta 285

<210> 292  
<211> 268  
<212> IMA  
<213> Fattus norvegicus

<220>  
<221> unsure  
<222> (1)..(268)  
<223> unsure at all n locations

<400> 292

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ctgcgcaggg caccctctcta ctgtccagta ctaccaaggg ctgtatgaaa cactagaatt 120  
ggctgaggac atggaaatcg acatccctca tgtatggctt tacctggcag aactgataac 180  
acctattctt caggaagacg gggtaacct gggagagctc tttagggaat ttacgaagcc 240  
tctgagaccc atgggcaag ccacttct 268

<210> 293  
<211> 185  
<212> IMA  
<213> Fattus norvegicus

<220>  
<221> unsure  
<222> (1)..(185)  
<223> unsure at all n locations

<400> 293

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cccttcatga agggcgatgg gtctgctgag gacttcatcc nagaagggga aggacntcaa 120  
gggggtntnn gaatncngcn nnnanggaag aaantnnaac tcnccatcan ctannggncc 180  
aangt 185

<210> 294  
 <211> 286  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(286)  
 <223> unsure at all n locations

<400> 294  
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 ttaataagat gttctatattt ctggatgat ataaaattat ctctacttaa tgcataact 120  
 ggcaaaaaaa aaactatcat tgcaaatgcc tccagtgaa accaataact tctcanatat 180  
 ttagaattat tgggtataac tcaactaacct agtttcttaa natcanttta anatttgatt 240  
 tatngtanag cantggnaa tgatgcenct ctatgttgt tttnac 286

<210> 295  
 <211> 225  
 <212> DNA  
 <213> Rattus norvegicus

<400> 295  
 gctcccggc ttgectgccc agttttatcc ctagaagcag ctactactc caggtgcaca 60  
 ggtgcacatgc agccccgaat gctctcctc gtggccctcg tggctctctt ggctctgccc 120  
 ctatgtgatg agggagaggg atccttgctg ctgggctcta tgcagggcta catggaacaa 180  
 gctccaaga cgggtccagga tgcactaagc agcatgcagg agtct 225

<210> 296  
 <211> 278  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(278)  
 <223> unsure at all n locations

<400> 296  
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 nttccatcaa ntatcanaca naaattgaca agccatccca natgcangtg acgngtgccc 120  
 aggacaacag catcagtgtc aggtggctgc ctccaattct nctgtggaca ggtaccgagg 180  
 nccagcgggtt ccncaaaant gggactgac naacanaatc tcaaactgtc nagtccagat 240  
 canacagaga tgnccattga agngtgcaac ccaccgtg 278

<210> 297  
 <211> 290  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(290)  
 <223> unsure at all n locations

<400> 297  
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 agagaagttc gaggtggana ggaaacctca ttgcaccat gaacttctcc ggcaagtacc 120  
 aagtgcagag ccaagagaaac tttagacctc tcctgaaggn nannggnetg netnaggnet 130  
 tcctncngaa angganggnc atcaaggggg tgccagntat netgcatgan ggganctctt 240  
 caaatnanca ncaactatng tncagtgat cnaatgagtt caactggggc 290

<210> 298  
 <211> 296  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(296)  
 <223> unsure at all n locations

<400> 298  
 agcaagccta ttctgactg gnetgctgtg cagaatctag accactggca gtgggtgaca 50  
 gccagttga ggttaatcga agtctctctg caggctctgc tgtaagtctg gcctcttggc 120  
 cccacatctt ttttgtggga tcttcccta tctccagctt cctcagctgg tcagggagat 130  
 ttggctcaga actagaagcc ttaataatct gagcaggtaa gagaggagta aatgtacag 240  
 tcttgacat tgactaaagg gtctgcaga ggatatcaag gtaagtggct tggagg 296

<210> 299  
 <211> 277  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(277)  
 <223> unsure at all n locations

<400> 299  
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 gcccctccg gctgcttggg aaacggagcc tccagaagg ggtggtggat gcattgagat 120  
 ctacagcacc aagatcagct gcaaggtagc ctccgcctt gctcacaatg ttgtaccac 130  
 aagggtgtgc aaccgtgcag acaaggccaa gaagtctctt ttgatgtgga ctgcccaaga 240  
 cagcctncat caccaacttc accttgatat ngatggg 277

<210> 300  
 <211> 287  
 <212> DNA  
 <213> Rattus norvegicus

<400> 300  
 ctcagttctt gaagagaagc acctggcac agttctcttg agttttggac ctaggtctac 50  
 aacctgaag gtagcaatta tctttctctt cagtggcttt ggccctgtct aatttagcag 120  
 gtaacactac agctaagggt attgggaaaa agcctaattg ccctaataca cttgttggat 130

gcccagggga ttatgatcct gtgtgtggta ctgacggaaa aacttaagcc aatgaatgca 240  
 ttatagctt tgaaaacagg aaatttggaa catctatccg cattcag 287

<210> 301  
 <211> 85  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(85)  
 <223> unsure at all n locations

<400> 301

ttctcttga cgctaggnaa cattccagtg tagctgaggc tgtcccaaa ccagtgaggn 60  
 gcccaggatg ttcttgaaag ggctg 35

<210> 302  
 <211> 295  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(295)  
 <223> unsure at all n locations

<400> 302

gggacacagg tgaacatnt ctctgacgc taggaaacat ccagtgtagc tgaggctgtc 60  
 ccaaacacagt gaggagccca ggatgtncn gaaggtgtgt gtgtgtaccc tggeccctgg 120  
 ggcacacacc gggacccagg ctgaggtcac ttccgacng gtggccaatg tgatgtggga 180  
 ctacttcacc cagcnaagca acaatgccaa ggaggtgtgt gaacaactgc agaagacaga 240  
 tgtactcaa cagctcaata ccctcttcca ggacaaaactt ggaacattaa cacct 295

<210> 303  
 <211> 279  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(279)  
 <223> unsure at all n locations

<400> 303

cttcattctt ctggggggcc catggggcgg ttccatcaag cccatgcgga tctggcctc 60  
 aggtgacaac cagggcatcc cgatcatgtc caacataaag ctgagagaag aacagcgcac 120  
 aaccacaact tccccctgga tgtttccagc tcaccacgtg tggcctgaag accacgtgtt 180  
 catttcaca ccaaaacttc cnacacaggc caagacttcg agcgtttttt tgcagatctt 240  
 cattttgaag aaggttgga catgtttcta cagtctcgt 279

<210> 304  
 <211> 306  
 <212> DNA

<213> Rattus norvegicus  
 <400> 304  
 attgggagtc ctgggtgct tacaacttgg agccacctgt gtcttgccc ccaagttctc 60  
 tgttcccgga tactgggctg agtgcgggca gtacagtgtg acagtggtec tglatgtggg 120  
 tgaagtcttg cgatacttgt gtaatgtccc agggcaacca gaagacaaga aacatacagt 180  
 qgggttcgca ttggggcaatg gacttcgggc agacgtgtgg gaaaacttcc agcaacgatt 240  
 tgggtccatt cagatctggg aactctacgg ctccacagag ggcaacgtgg gtttaatgaa 300  
 tatggg 306

<210> 305  
 <211> 296  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 305

qgggtttctct gtatttacct ctacaagatc cctggatggg gtctctgggt tcttccaagg 60  
 qggcttctctg ctacgtctat ttctgggtgct gttcaaggca gtccaattct acttacgaag 120  
 qgaatggctg ctcaaggccc tcgagaagtt cccatccacg ccttccact ggctttgggg 180  
 ccaagacctg aaggacagag aattccagca ggttcttacg tgggtagaga aattccagg 240  
 tgggtgctta cagtggctct cagggagcaa aacacgagtc ctgctctatg acctg 296

<210> 306  
 <211> 147  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(147)  
 <223> unsure at all n locations

<400> 306  
 ttagcttcgg tgcttcccat gagnetccc tgcaatcagn aactatgctt tccctgaggg 60  
 tccctgcttt catctnagc ttggccagca cagtctggac tgcagacacc ggcaccacaa 120  
 ttgaattcat anaagcagga ggnnata 147

<210> 307  
 <211> 312  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(312)  
 <223> unsure at all n locations

<400> 307  
 gcatccgcta agtgcgtggg gcgaactgnc gctgggtgcg gttgtcgogg tgcgcaactgc 60  
 ctctcgggtcc aatgagctgc accaggatga tccacgtgct ggatccacga cctttgacaa 120  
 gttcagtcac gcccgtagac atggccatga ggatttgctt ggcacattca ccacctga 180



aaagtttctt gggtecttat aatgggtcttc agcgaagaca ttttgtgaat aaaccgaagc 240  
 ccttgaaacc gtgtctcagc gtcaagcagg aagccaaatc acagaaggaa tgggaagagc 300  
 cncacagcca ag 312

<210> 308  
 <211> 284  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(284)  
 <223> unsure at all n locations

<400> 308

gtcagtttca ctgtggaggt cctgcttcca gacaaagcag cagaagagaa gttgaatcag 60  
 caggggggcag tcacccccaa ataacatctc cctcctgcag caggcctggc cccctcagc 120  
 gcttctctgt cagtttcttt atagtcattt tctacaacc tattagacca aagaaactgg 180  
 gctggaggga agacttcaga ctggacggag caccggttca gagtcagaag cggataanta 240  
 gctagagggg tctctcncat cagaatacta aagggtctcc agag 284

<210> 309  
 <211> 293  
 <212> DNA  
 <213> Rattus norvegicus

<400> 309

gtagccactc taactagggg cgtgctgaga caagaccacc tcattctctc gctgcttttc 60  
 agacaggact gtctgcca cccaccatga tccaggtgc actgttctt ggctgtatct 120  
 tactgtctc ggtgaccgc ttccatgga agactcagga tgggtggctg ccccatcagc 180  
 cagctggcac agaaactgag cctacacaac tgctctacag caagagtctt cctccgacct 240  
 ccagtaacctg tcggaacctc ctaagcatgg cgcacctgcc cctgtagtc etc 293

<210> 310  
 <211> 208  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(208)  
 <223> unsure at all n locations

<400> 310

gtccctgang cctacaccat cctgcgtgag agatgccctg ctcattttga ctcagagtct 60  
 gtccctctgc ttgtctctn caagccatnt ggctctacct gctggcactg gtgggcctgt 120  
 ggaacctctt gcgcttgctt agggagngga nngtggttag cnatctccaa gacaagtatg 180  
 tcttcctcac ggctgtgat caggcttt 208

<210> 311  
 <211> 280  
 <212> DNA

<213>        *Fattus norvegicus*

<220>

<221>        unsure

<222>        (1)..(280)

<223>        unsure at all n locations

<400>        311

ggctgtaatg gggctgctg gctcccccttg gcagtgggtg ctgttgctgt tggggetact    50

gtccccctct ggcacennct tctggctect caatgtgcgc tccccccgc acaccaagcc    120

caaggctgaa ctcagtaacc acacacggcc tgtcctctc gtgcttggt gcctggggaa    130

cgggctagaa gccaagcttg ataaacaaaa tgtggtaaac tggctgtgct accgaaanac    240

agaggatttt ttaccacngn ctggattcan anntttcnnc                            280

<210>        312

<211>        181

<212>        DNA

<213>        *Fattus norvegicus*

<220>

<221>        unsure

<222>        (1)..(181)

<223>        unsure at all n locations

<400>        312

ctggaacact ttaattctgt ccacaagggc agagtgnacn aactcccagc aatctaggac    50

tncaaccttt agccttttagc ctactctctg agggttatgg tgatcaattt tcttggaact    120

gaagacttgg acatggactg agacctcagt tacagacagc ctgttgtgag acttctcagc    130

c    181

<210>        313

<211>        174

<212>        DNA

<213>        *Fattus norvegicus*

<220>

<221>        unsure

<222>        (1)..(174)

<223>        unsure at all n locations

<400>        313

caenaagcta tntataatgg ccagactata cttggtttga aggaatacct ttctatgcct    50

ttgggattgc cnaaganaac ttgcaaaat gtttgtaata aagtttgtgg tgaaanacga    120

agatttgatt tcattggctt atcccaagtc aggaacgacg cgccggctcg naat            174

<210>        314

<211>        289

<212>        DNA

<213>        *Fattus norvegicus*

<220>

<221>        unsure

<222>        (1)..(289)

<223>        unsure at all n locations

<400>        314

atTTTTgttt acccactcga gaagtaagcg ccaaaggggc tagtaagaga acagacagcg 60  
ctgggtgggtgg ctatTTgtct cagggcctaac cagtggggaa gtggatttgc gggacacgtg 120  
tcttagcctg gacacttagg ggttcttagc ttgtgaagcc aatcnggtg gaaccgatgt 180  
ggatnaggnt gcantgnnc tctgtttccc cccaaacttc ccagtaacc ttggggcaag 240  
gtggatgaac ncagngattt ttgaaaagtc aaaaacttcg gtttgttta 289

<210> 315  
<211> 309  
<212> DNA  
<213> Rattus norvegicus

<400> 315

gcccagtgtt ctagggacca tgccatggag gaccagaca agaaagggga agccagagcc 60  
gggagcgaag tagggctctgc cagccccgag gagcaacttg acggatcagc cagcccagtg 120  
gagatgcagg atgagggatc agaggagctt cagcagacag gagagccctt gcccccttc 180  
ctgctgaagg aggggtggaga tgaggggcta cactcggcag agcaggatgc cgatgatgag 240  
gtagctgatg atacagatga caccagctcg gtgacctctt ctgccagtct accacctctt 300  
ctcagagtg 309

<210> 316  
<211> 311  
<212> DNA  
<213> Rattus norvegicus

<400> 316

cagacctcca ggagaacctg gaagaagtc ttccaagct gctagctgag aacattcgat 60  
gcttctacct ttggccacagc tcacctctc cgggcgtaga ggctctagga gctgccctgg 120  
acgctgcacc ttctgacctg gtgctgcca agcttctgtc taatataaag tggaaatccc 180  
cagcatatt catctatact tcagggacca c 211

<210> 317  
<211> 282  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
(1)..(282)  
<223> unsure at all n locations

<400> 317

agccggcagc cgagtcggat tgnctgctg cagacgccag gccactccag ccagcactgc 60  
cgttttcagc ccccggtgc agacagctag gaggtttat ctagtttgaa ccaggctgct 120  
ggagctcgtt ccttccctct ctttttttcc acgaggtgt ttttttattt ggctgcatgc 180  
atgaaatccc aatggtgtag accagtggcg atggatctag gagtttacca actgagacat 240  
ttttcaattt ctttctgtc gtctttgctg ggaatgaaaa cg 282

<210> 318  
<211> 261

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(261)
<223>      unsure at all n locations

<400>      318
augggagaga aatcaatgaa ttttcaatct tgttttttta atgaggcagt gatattatag   60
catggttaaa ctgctttaat ttacactttt gattgggtgc tggggaataa acctaaagca  120
tggcatatta atgaagaara tatggtaacc atgaactcca tctctggatt cctttatcgg  130
cnatttttta aaggttgaat attcgcacca gagaatgaca agtggttttg acaacatact  240
ctaggccttc tattaanaac a                                     261

<210>      319
<211>      273
<212>      DNA
<213>      Rattus norvegicus

<400>      319
cgtggttaca ccaggaccat ggagcccagt atcttgcctc tccttgcctc cctcgtgggc   60
ttcttgttac tcttagtcag gggacaccca aagtcocgtg gcaactccc accaggacct  120
cgtccccttc cctcttggg gaacctcctg cagttggaca gagggggcct cctcaattcc  130
ttcatgcage ttcgagaaaa atatggagat gtgttcacag tacacctggg accaaggcct  240
gtggtcatgc tatgtgggac agacaccata aag                               273

<210>      320
<211>      205
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(205)
<223>      unsure at all n locations

<400>      320
ccaggaccat ggagcccagt atcttgcctc tccttgcctc ccttgtgggt tcttgtaact   60
cttagtcagg ggacacnaa attccttggg aaatttcna caagnacttg nncctttcc  120
cntntngggg aacnctgaa nttggaaana ggaggctcc tnantnctt cagnagtgtt  180
cgcgaaaaat atgganatgt ntnc                                     205

<210>      321
<211>      289
<212>      DNA
<213>      Rattus norvegicus

<400>      321
caccaggacc atggagccca gtatcttgcct cctccttgcct cctccttggg gcttcttgtt   60
actcttagtc aggggacacc caaagtcctg tggcaacttc ccaccaggac ctgctccct  120
tcccctcttg gggaacctcc tgcagttgga cagaggaggc cctctcaatt ccttcatgca  180

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gttttcgcgaa aaatatggag atgtgttcac agtacacctg ggaccaagge ctgtggtcac 240  
getatgtggg acagacacca taaaggagge tctggtgggc caagctgaa 239

<210> 322  
<211> 255  
<212> DNA  
<213> Fattus norvegicus

<220>  
<221> unsure  
<222> (1)..(265)  
<223> unsure at all n locations

<400> 322

gcacatttggc tcccaaggac attgacctca cgcaccaagga gaggggcatt ggaaaaatac 60  
ctccaacgta ccagatctgc ttctcagctc ggtgatccgg ctgaggcagc catgtgcccc 120  
agttctgttg ggaatggggt catgtttctg cctctggggg acctgctgaa aaccaggctc 180  
aaggccactg ctccactctt cctattgcag ttctccaaag tcccaaggct tttctctatt 240  
cctgtgaatg gcattgaaga agtca 265

<210> 323  
<211> 234  
<212> DNA  
<213> Fattus norvegicus

<400> 323

gtaaaatgac ataacctgat gcagttatcc atgagattca gaggttttca gatcttgccc 60  
ctattggagt accacacaga gtcaccaaag acaccatgtt ccgagggtac ctgcttcccc 120  
agaacactga agtgtacccc atctgagtt cagctctcca tgaccacag tactttgacc 180  
aaccagacag ctccaatcct gaacacttcc tggatgccaa tggggcactg aaaa 234

<210> 324  
<211> 235  
<212> DNA  
<213> Fattus norvegicus

<220>  
<221> unsure  
<222> (1)..(235)  
<223> unsure at all n locations

<400> 324

gaaacttggc cattctagca gcacagantc agaactgaga actggccatg gcacggaaac 60  
aaccacatag ctgggtgaan gctgtgctct ttgggtcctt gcttattctt atccatgtgt 120  
ggggtcagga ctccaccagag tccagctcca tcaggaccac acaanatann attnanaaan 180  
gnaagcttga cnacgtgagg gacactaaag ctggtgtcca nacaacanaa ngttc 235

<210> 325  
<211> 263  
<212> DNA  
<213> Fattus norvegicus

<220>

<221> unsure  
 <222> (1)..(263)  
 <223> unsure at all n locations

<400> 325

aaagtcacaa ggnttggtct tatteetgtg aatggcactg aagaagtcaa tgcactgtct 50  
 tattttgaca tgtgaacaga gatttcatga gtacacatct catgctgagt cacttccttc 120  
 tteectctaa tagccacagt ccccaattat cagccctcca tggctctgtga tctgtgctaa 130  
 tggactctgt atatgggtct agtgctatgt ctacagaatt acatagtatg tatggttcag 240  
 gtaaacagat cacagagtgt gtg 263

<210> 326  
 <211> 300  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(300)  
 <223> unsure at all n locations

<400> 326

gtgcagaaag actgaaggag ccagaaanta tcaatgccag ggaaactgtc ttcgagaccc 50  
 aacaggaact gatacacag ccaaacacgc aatgtcttcc cctgcacagc ctgcagttcc 120  
 tgcctcactg gcaaacctga agattcaaca caccaagatc ttnataaaca atgaatggca 180  
 tgattcagtg atggcaagna attacctgtc cttaacctgt caatgaggag gtcactctga 240  
 atgtgggaag agggacaagg cagatgttga caagctgtga agccgcaaga caggctttcc 300

<210> 327  
 <211> 350  
 <212> DNA  
 <213> Rattus norvegicus

<400> 327

attggtgtta aacacagatga gtactgttgc accattccta tggctcatggg cactgctcaa 50  
 ataataaagg agctatccag agagaacctg caggetgttc taaaggatac agcagcacia 120  
 atgatgttcc cctctgagtg tggtgacctg ctcatggaag agtacatggg gaacactgat 180  
 gattccacaga cctacaaat acagtacaca gagatgatgg gagacttcc ttttgtgato 240  
 cctgcactcc aagtagcaca ctctcagcgt tcccatgccc ctgtctactt ctatgagtcc 300  
 caacatgcac ccagctatcc aagaatgtca ggccacccca gtgaaggtga 350

<210> 328  
 <211> 258  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(258)  
 <223> unsure at all n locations

<400> 328

agantgtnga gcgagcnaag naatatgtcc ttgganance tetgnnccaa gnaatanatc 60  
 aggggcectca gattnacaag gagcaacatg ataaaatcct tgatctcant gagagtggga 120  
 agaangaagg agccaanctn gagtgtggtn taggaacgng ggggnacaaa ggcttctttg 180  
 tccanccenn agtcatctcc aatgtgaeng atgagatgng cattnccnaa gagnggatat 240  
 ttggancagn gcaacaaa 258

<210> 329  
 <211> 245  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(245)  
 <223> unsure at all n locations  
 <400> 329

gaaatgatgt ggcacgttc atcaactggc tggaggnaga atttaactac cccctagaca 60  
 atgtccacct cttaggttac agtcttggag cccatgtctc tggcgtggca ggaagtctga 120  
 ccaaaagaag gtcaatagaa ttactggctt ggatccagct gggcctaact ttgagtatgc 180  
 agaagccctt agtgccttt ctctgatga tgcggatttc gtagatgtct tacacacatt 240  
 tacca 245

<210> 330  
 <211> 191  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 330

gattatttgt agccaccatg agagactttg ggataggaaa gcagagtgtg gaggatcaga 60  
 taaaggagga ggcctaatgt ttagtggagg aactgaagaa tcatcaggga gtctccctgg 120  
 acccaacgtt cctcttcacg tgcgtcacag gcaacataat ctgtctccatt gtctttggag 180  
 agcgctttga c 191

<210> 331  
 <211> 265  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 331

aggaagccct gcagagcatc agaggcccag ctagaggggac aacacagagg agtaatttgc 60  
 tgacagacct gcaggggatg acctgttttc agctctcaca ctggaaacct gggctctctc 120  
 ggcagtctgc ctgggtctcc tctacggatt tgggaccgcg acacatggac ttttcaagaa 180  
 acaggggatt cctgggcccc aacctctgcc tttttttggc actgtgctga attactatat 240  
 ggggttatgg aaattcgatg tggag 265

<210> 332  
 <211> 296  
 <212> DNA  
 <213> Rattus norvegicus

<400> 332  
 tactgtctgga accaacgtcc tctcttacc ccacattct tctgtcacct ctaccacggg 60  
 accatgtcg caagcccggc ctgccactgt gctgggtgcc atggagatgg gtcccccgc 120  
 ggtgtgacc tccagctccg cgtcgggtgg cgccttctg cagcgcggcc acacggagat 180  
 agacaccgcc ttctgttatg cgaacgggtc gtctgagacc atctaggag acctggggct 240  
 cggactgggc cgcagcggct gcaaaagtaa aattgccacc aaggctgccc caatgt 296

<210> 333  
 <211> 214  
 <212> DNA  
 <213> Rattus norvegicus

<400> 333  
 gagatgttcc ctgtcatcga acagtatgga gatattttgg taaaatactt gaggaagag 60  
 aaaggcaaac ctgtccctgt gaaagaagly ttgggtgcct acagcatgga tgtgatracc 120  
 agcatatcat ttggagtga tttgtattcc ctcaacaacc cgaaggatcc ttttgtggag 180  
 aaagccaaga agctcttaag aattgatttt ttg 214

<210> 334  
 <211> 183  
 <212> DNA  
 <213> Rattus norvegicus

<400> 334  
 ggcagcattg atccttatgt atatctgcc ttggaaatg gaccaggaa ctgcattggc 60  
 atgaggtttg ctctcatgaa tatgaaactc gctctacta aagttctgca aaacttctcc 120  
 ttccagcctt gtaaggaaac acagatacct ctgaaattaa gcagacaagg acttcttcaa 180  
 cca 183

<210> 335  
 <211> 174  
 <212> DNA  
 <213> Rattus norvegicus

<400> 335  
 attggcacca aggagggaat cctgcagtac tgccaagagg tctacctga actgcagatc 60  
 acaaacgtgg tggaagccaa ccagccagt accatccaga actggtgcaa gcggggccgc 120  
 aagcagtga agacgcacac ccacatcgtg attcttaccg gtgcctagtt ggtg 174

<210> 336  
 <211> 241  
 <212> DNA  
 <213> Rattus norvegicus

<400> 336  
 atttgggcat ggggaaaagg aacattgagg atcgtgttca agaggaagca cgggtgccttg 60  
 tggaggaaat gaggaaaacc aatggctcac cctgtgacce cactttatc ctgggctgtg 120  
 ctcttgcga tgtcatctgc tccattattt tccagaatcg ttttgattat aaagatcagg 180



at t t t t e t t a a c t i g a t g g a a a a c t c a a t g a g a a c a t g a a g a t t t t g a g c a g t c c c t g g a 240  
c 241

<210> 337  
<211> 289  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(289)  
<223> unsure at all n locations

<400> 337

a t g a a g g t c t t t g t g c c c a c t g g c t t t t c a g c t t c c c t c c g a g c t a c t g c a t g c c c c a 60  
g a a a a a g t g g t g a a g g t c a a g t a c c c c a a a c t c a t c t c c t a t t c c t a c a t g g a a c g t g g 120  
g g g c a c t t t t g c t g c c t t t g a a g a g c c c a a g c t t c t g g c c a g g a c a t c c g c a a g t t c g t g 180  
t c c c t g g c t g a g c t g n a g t a n t n a c g g n t t a n n a a a n t g t g g c t t t a g n a n a a n c c t g g t 240  
t c c c c a n a g n a a n n t t g g g n a a c c c c c c t n g g g a a a a n t t n t c c c c c c 289

<210> 338  
<211> 243  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(243)  
<223> unsure at all n locations

<400> 338

t g g g a g a g a a g g a a g c c c t g c a g a g c a t c a g a n g c c c a g c t a g a g g g a c a a c a c a g a g g a 60  
g t a a t t t g c t g a c a g a c c t g c a g g g a t g g a c c t g c t t t c a g c t c t c a c a c t g g a a a c c t g 120  
g g t c t c t c t g c g a g t c g t c c t g g t g c t c c t c t a c g g a t t t g g g a c c c g c a c a c a t g g a c t 180  
t t t c a a g a a a c a g g g g a t t c c t g g g c c c a a a c c t c t g c c t t t t t t t g g c a c t g t g c t g a a 240  
t t a 243

<210> 339  
<211> 289  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(289)  
<223> unsure at all n locations

<400> 339

g c a g a a a g g a a g c c c t g c a g a g c a t c a g a g g c c c a g n c a g a g g g a c a a c a c a g a g g a g t a 60  
a t t t g c t g a a c a g a c c t g c a g g g a t g g a c t g c t t t c a g c t c t c a c a c t g g a a c c t g g y 120  
t c c t c t g g c a g t c g t c c t g t g c t c c t c t a c g g a t t t g g a c c c g c a c a c a t g g a c t t t 180  
n c a a g a a a c a g g g a t t c c t g g g c c c a a a c c t c t g c c t t t n t t t g g c a t g t g c t g a a t t n 240

ctatatgggt ttatggaaat tcgatgtgga gtgccataaa aagtalgga 289

<210> 340  
 <211> 289  
 <212> DNA  
 <213> Rattus norvegicus

<400> 340

tttaagggt atctatctca tcagaaatcc cagagatggt cttgtttctg gttattatct 60  
 ctggggtaag acaactcttg cgaagaagcc agactcactg ggaacgtatg ttgaatgggt 120  
 cctcaaaagg aatgttccgt atggatcatg gtttgagcac atccgtgctt ggtgtcttat 180  
 gcgagaatta gacaactctt tgttactgta ctatgaagac atgaaaaagg atacaatggg 240  
 aaccataaag aagatatgtg acttccctggg gaaaaaatta gagccagat 289

<210> 341  
 <211> 278  
 <212> DNA  
 <213> Rattus norvegicus

<400> 341

atgggaatacc tggatatggt gttgaatgaa acctcagat tgtatccaat tggtaataga 60  
 ctctgagagag tctgtaaaaa agatgttgaa atcaatgggt tgtttatgac caaagggcca 120  
 ctgggtcatga tcccatctta tgcctcttcc cgtgatccac agcaactggc agagcctgag 180  
 gaatttcgcc cagaaagggt cagcaaggag aacaaggcca gcattgatcc ttatgtatat 240  
 ctgcctcttg gaaatggacc caggaactgc attggcat 278

<210> 342  
 <211> 312  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(312)  
 <223> unsure at all n locations

<400> 342

cggtcgggtac cggagagcgc aggttgtatc accaactatg gggactctca cgaagacacc 60  
 agtgccacca tgccctganc cgtggctgaa gaagtgtctc tattcagcac gacggacatg 120  
 gttctgtttt ctctcatcgt gggggctctg acctactggt tcattctttag aaagaagaaa 180  
 gaagagatac cggagttcag caagatccaa acaacggccc caccctgcaa agagagcagc 240  
 ttcgtggaaa agatgaagaa aacgggaagg aacattatcg tattctatgg ctcccagacg 300  
 ggaaccgctg ag 312

<210> 343  
 <211> 287  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(287)

<223>        unsure at all n locations  
 <400>        343  
 agcttagtgag gctcttgggg ctgcgacctt cctcgcagag gggtttgcac taaggcgctg    60  
 gggtgcgtga ctcggggcgc tgtggacctt ggctccgcgc caggcgcaca acagggaccg    120  
 tgcangccag gaggatgagg accgttggga acacgggggg accgtaaggc ccggaagccc    180  
 ctgggtggaga agaagcgacg cgcgcggatc aacgagagtc ttraggagtt gcggctgctg    240  
 ctagggggca ccgngtgcag gccaaactag agaacgcga ggtgctg                    237

<210>        344  
 <211>        232  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        344  
 cattcttgag cagtaccaca tttttgagcc caagtgcctg gacgccttcc caaacctgaa    60  
 ggaacttctg gcccgctttg agggcctgaa gaagatctct gcctacatga attgcagccg    120  
 ctactctctc acacctatat tttcgaagtt ggcccaatgg agtaacaagt aggccttctg    180  
 taacttgcca ctacagaga ggacctgtcc acattggatc ctgcaggcac cc                232

<210>        345  
 <211>        223  
 <212>        DNA  
 <213>        Rattus norvegicus

<400>        345  
 tgtctgcaag cacaacattg aatcagtaac agttgtcagg gtgggtgact gcccatggaa    60  
 tggatctttt attcatgagc aattcagccc caaaatgaat ttggaaaact tttgcctgaa    120  
 gtacttattg aaatacaatc aagagacctg ctgaatattt tgatgcgttc tcaaaagtgt    180  
 atggttctgt atttactctt tactttggca tgaagcccac tgt                        223

<210>        346  
 <211>        278  
 <212>        DNA  
 <213>        Rattus norvegicus

<220>  
 <221>        unsure  
 <222>        (1)..(278)  
 <223>        unsure at all n locations

<400>        346  
 atggagtaac aagtaggccc ttgtacact ggcactcaca gagaggacct gtccacattg    60  
 gatcctgcag gcacctgggc cttctgcact gtggttctct ctcttctctg ctcccttctc    120  
 cagctttgtc agccccatct cctcaacctc accccagtcg tgcccacata gtcttcattc    180  
 tccccacttt ctttcatagt ggncccttct tttattgaca ccttaacaca acctcacagt    240  
 cctttctctg gattgaggtc tgccctgaac tcagtctc                                278

<210>        347  
 <211>        295

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<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(295)
<223>      unsure at all n locations

<400>      347

gggggccgtg ggtgatctgg tcggtaccgg agagcgcagg ttgtatcacc aacatggggg   60
actctcacga agacaccagt gccaccatgc ctgaggccgt ggctgaagaa gtgtctctat  120
tcagcaccgac ggacatgggt ctgtttttct tcatcgtggg ggtcctgacc tactgggtca  180
tttttagaaa gaagaaagaa gagataccgg agttcagcaa gatccaaaca acggccccac  240
cgttcaaaga gacgagcttc gtggaaaaga tgaagaaaac gggaangaac ttatc      295

<210>      348
<211>      230
<212>      DNA
<213>      Rattus norvegicus

<400>      348

tcagtgcacg aacaggaact taaccttttg tgattctcat gggactacct ccattccat   60
ctgggtgtct ctgttaattt cttttgatag taaccttgtc tctgtaattt gatcaagaat  120
ttttcatgaa aatgtgaact attgtgacaa ctttaattgt agatttggtg tcagatgttt  180
tcagatgcatt attctacact aaatgttaca tggaaaaaat gtgaataaac      230

<210>      349
<211>      282
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(282)
<223>      unsure at all n locations

<400>      349

cccggtcteta tattaggcca acagcggccc tagccgaggc tgttcgtgaa gaagggcact   60
ggtccgttta gcgtctccg ctcgngtgcc caccgcgcgc tcgtcgagag ccgcgcgagg  120
accggggaca ctttgacgac atggagactg tcgttcgcag atgcccatte ttatcccgag  180
tccttcaggc ntttctgcag aaggcaggga aatctctgct gttctatgct caaaactgcc  240
ccaagatgat ggaagtcggg gccaaagcgg ctctcgggac cg      282

<210>      350
<211>      280
<212>      DNA
<213>      Rattus norvegicus

<220>
<221>      unsure
<222>      (1)..(280)
<223>      unsure at all n locations

<400>      350

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cccaggcagt tcacccgagg ccgatctccg aggtctgcca ggggtactt cccacagcct 60  
 cggccatggg tctggagctt ctacctggac ctgalgtccc agcnntggcg tgcgctctac 120  
 atcttcgcca agaagaacgg catccccctc cagctgggta ccategagct gcttaaaggt 180  
 cagcattaca ctgatgcctt tgcccagggtg naccctttga ggaaggtgac ggctttgaag 240  
 gatggggact tcgtcttggc agagagtgtg ccactttgct 230

<210> 351  
 <211> 309  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(309)  
 <223> unsure at all n locations  
 <400> 351

tcttagccaa catgatcagt gaaccagaa tcagttacgg caacgagtct ctcatgcctt 60  
 ctcttgactga nacgaagacc actgtggagc tccttcctgt gaatggcgaa ttcagcctgg 120  
 atgatctcca accgtggcat ccttttgggg tggactctgt gccagccaat acagaaaatg 180  
 aagggtctgg gttgacaaac atcaagacag aagagatctc agaagtgaag atggatgcgg 240  
 agttcggaca tgattcangc ttccaatccg ccatacaaaa ctgggtggct tgcagaagng 300  
 tgggtcaaa 309

<210> 352  
 <211> 228  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 352

gctggctgca aaatcttcga gagccgacc aaactggctg cgtgggtgca gggggtggaa 60  
 ggcgcagtgg gggagagcct ctccaggag gccatgaag tcgtcttgaa ggccaaagat 120  
 atgcctccct tgatggacc gacctgaag gagaaactga agctctctgt tcaatgcctg 180  
 ctgcactgag ggaacagcct gaagtcaagg gaaacttggg gtgtgctt 228

<210> 353  
 <211> 298  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(298)  
 <223> unsure at all n locations  
 <400> 353

caggatcatg gatactagtg tccttctcct ccttctgtc ctctcagct tcttctatt 60  
 cctggtcaga ggccatgcaa aagttcatgg tcactctcca ccaggacccc gtcccttacc 120  
 cctcttggga aacctcttgc agatggacag aggaggttt cgtaagtctt tcattcagct 180  
 tcaagaaaa cacggagatg tgttcacagt atactttgga cctaggcctg tggatcatgt 240

gtgtgggaca cagaccataa gggaggctct ggtggacatg ctgaggnttc tctggcgg 298

<210> 354  
 <211> 326  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(326)  
 <223> unsure at all n locations

<400> 354

gacaaaatcc cagaataagg aaactctgaa ccaggagtca tggaagtcaa acccaagctc 60  
 tactactttc aaggcagggg aaggatggag tcgatccgct ggctgctggc tacagctgga 120  
 gtggagtttg aagaagaatt tcttgagacg agagaacaat atgagaagtt gcaaaaggat 180  
 ggtatgctgc tttttggcca agtcccattg gtggaaatag acgggatgct actgacacag 240  
 accagagcca tcttcagcta cctggccgcc aagtacaact tgtatgggaa ggacctgaan 300  
 gagagagtca ggattgacat gtatgc 326

<210> 355  
 <211> 274  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(274)  
 <223> unsure at all n locations

<400> 355

tcttctcct ccttctgtc ccttcagct tcttctatt cctggtcaga ggccatgcaa 60  
 aagttcatgg tcattctcca ccaggacccc gtccctacc cctcttggga aaacnctttg 120  
 aagaatggac agaggaggct ttgtaagtct ttcattnagc ttcaagaaaa acacggagat 180  
 gtgttcacaa gtatacttgg aactaggcct gtggtcatgc tgtgtgggac acagaccata 240  
 agggaggctc tgggtggacat gctgangctt cctc 274

<210> 356  
 <211> 148  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(148)  
 <223> unsure at all n locations

<400> 356

cgccccact gcctcagaga cctacaggac cgcgggncgt gggatgatctg gtcgggtaccg 60  
 gagagcgcag gttgtatcac caacatgggg qactctcagc aagacaccag tgccaccatg 120  
 cctgaggccg tggtgaaga agtgtctc 148

<210> 357  
 <211> 302

<212> DNA  
 <213> Rattus norvegicus  
 <400> 357  
 ctgagatctga ctgaaatgat tatccaattg gtaatatgtc ccccagacca aagagaagcc 60  
 angacgcgct tggcaaaaga caggaccaa aaccggtaact tgcctgcctt tgaaaagggtg 120  
 ctgaagagcc atggccaaga ctactttgta ggtaacagggc tgaaccgggt agacatccac 180  
 ctgctggaac ttctctctta tgttgaagag ttgatgcca gcttctgac ctctttccct 240  
 ctgctgaagg ccttcaagag cagaatcagc agcctcccca atgtgaagaa gttcctgcag 300  
 cc 302

<210> 358  
 <211> 286  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 358  
 cggagtgaa ccaaggcact gagcggcctc taatgcacct ggagttggac atctcagact 60  
 ccaagatcag gtatgaatct ggagatcacg tggctgtgta cccagccaat gactcagccc 120  
 tggtaacca gattggggag atctggggag ctgacctgga tgtcatcatg tctctaaaca 180  
 atctcgatga ggagtcaaac aagaagcctc cgttcccttg ccccaaccacc taaccgacgg 240  
 ccttcaccta ctacctggac atcactaacc cggcagcac caatgt 286

<210> 359  
 <211> 320  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 359  
 caagttcctg cagaacaagg ccttcttaac aggaccccat atctccgtgg ctgacttggt 60  
 ggccatcaca gaactgatgc atctgtcag tgcctggtgc aaaatcttcg agagccgacc 120  
 caaactggct gcgtggcgtc aggggtggaa gccgcagtgg gggagagcct ctccaggag 180  
 gccatgaag tcgtctgaa ggccaaagat atgcctccct tgatggacct gaccttgaag 240  
 gagaaactga agtctctgtt caatgctgct gcctgagggg acagcctgaa gtcaagggaa 300  
 acttggtgtg gcgtgtgtgt 320

<210> 360  
 <211> 288  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(288)  
 <223> unsure at all n locations  
 <400> 360  
 tngcctctgt ccaccgaggg agttcaccgg aggccgatct ccgaggtctg ccagcggcta 60  
 ctccccacag cctccgccat gggctctggag ntctacctgg actgatgtcc cagccctgcc 120

gtgccgtcta catcttccgen aagaagaacg gcaccccttc cagctgcgta ccacgcagct 180  
 gcttaaagggt cagcattaca tgatgenttg cncaggtgaa cntttgngga aggtgccggc 240  
 nttgaagcng gagattcgte ttgccaanna tgtggcanch tgtgtat 288

<210> 361  
 <211> 272  
 <212> DNA  
 <213> Rattus norvegicus

<400> 361  
 gaactctgct caacagcttc ttctctagt tctgcagac aaaatcccag aataaggaaa 60  
 ctctgaacca ggagtcattg aagtcacacc caagctctac tactttcaag gcaggggag 120  
 gatggagtgc atccgctggc tgcctggctac agctggagtg gagtttgaag aagaatttct 180  
 tgagacgaga gaacaatatg agaagttgca aaaggatgga tgcctgcttt ttggccaagt 240  
 cccattgggtg gaaatagacg ggatgctact ga 272

<210> 362  
 <211> 286  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(286)  
 <223> unsure at all n locations

<400> 362  
 ggcccattga gcacaccag gctgtggact atgtaagaa gctgatgacc aagggccgct 60  
 actcactaga tgtgtggagt aggagctacc accctcccac cctcgcctcc ctgtaatcac 120  
 ctaactttctg ccgacctcca cctctgggtg tctctgctg gcttggacac agggaggccc 180  
 agggactgac tcttggctg agtngtgccc tcttggccc ctaagcagag tccggtccat 240  
 tttatcagge agcccagccc caaggcacat ggcaagaggg attgac 286

<210> 363  
 <211> 288  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(288)  
 <223> unsure at all n locations

<400> 363  
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 gctgaaaaaa ttaataaaga ccttggaatt gtttttagcc atggaaatag atggaaagaa 120  
 ataagacgct taccctcacg actctgcgga atttgggcat gggganaagg aacattgagg 180  
 ntccgtgtca anaggcaanc ccggnancct nggggaggac ctgnggaaan ccatggggcn 240  
 caccgtgnaa cccangtnt atccctgggc tngncnctt gnannacc 288

<210> 364



<211> 237  
 <212> DNA  
 <213> Rattus norvegicus

<400> 364

tcacagctaa agtccaggaa gagattgac gtgtgggtgg caaacatcgc agcccttgca 60  
 tgcaggacag gagccgcacg cctacacag atgccatgat tcctgaggtc cagaggttca 120  
 ttgacctcat tctaccaac ctgccacatg cggtagcctg tgacattaag ttcaggaact 180  
 acctaatacc caagggaaca acaataataa catcactctc atcagtctg catgaca 237

<210> 365  
 <211> 304  
 <212> DNA  
 <213> Rattus norvegicus

<400> 365

ggagaatgga gcccatccgg tggctcctgg ctgcagctgg agtagagttt gaagaacaat 60  
 ttctgaaaac tgggatgac ctggccaggc taaggaaatga tgggagtttg atgttccagc 120  
 aagtgcctat ggtggagatt gatgggatga agctgggtga gaccagagcc attctcaact 180  
 acattgccac caaatacaac ctctatggga aggacatgaa ggagagagcc ctcatcgaca 240  
 tctatgcaga aggagtggcg gatctggatg aaatagttct ccattaccct tacattcccc 300  
 ctgg 364

<210> 366  
 <211> 218  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(218)  
 <223> unsure at all n locations

<400> 366

ggcaactggc ggtttagcgt cctccgctcg agtgcceacc gncgtctcgt acgagagccc 60  
 ggcagaggacc cggcgacact ntgcagacnt ggagactgct gtttcgcaga tgcccattct 120  
 tctcccgagt cctcaggcn tttctgcaga aggcagggaa atctctgctg ttctatgctc 180  
 aaaactgccc caagatgatg gaatcggggc naancgg 218

<210> 367  
 <211> 269  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(269)  
 <223> unsure at all n locations

<400> 367

ggtcnccatg gatctggtea ctttctcggc acttactctc tctctctca ttctctctc 60  
 actctggaga nagnnccgct aggagaagga agctcnctcc tggccccact cctctccna 120

ttatcggtaa ttccctccn gatagatgtg aagaacatca gccaatccta accaagtttt 180  
caaaaaccta tggccctgtg ttcactctgt atttgggctc acagccnct gtcattttgc 240  
atggatntga agcnataaag gagctctgt 269

<210> 368  
<211> 270  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(270)  
<223> unsure at all n locations

<400> 368

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cagatctttg tgaaaacctt aactggtaag accatcacc tggaggctga gccagtgac 120  
accattgaaa atgtcaagge aaagatccag gacaaggagg gcattccccc tgaccagcag 180  
aggetgatct ttgcaggcaa gcagctggaa gatggccgca cctgtttcag actacaacat 240  
ccagaaggag tccacntgc acctggctct 270

<210> 369  
<211> 238  
<212> DNA  
<213> Rattus norvegicus

<400> 369

ggaagcaatg attctaggtg tgtttctggg gctttttcta acatgtctgc ttctctttc 60  
actgtggaag cagaattttc agagaagaaa ccttctctct ggcccacac ctcttcttat 120  
cattggaat attcttcaga tagatcttaa ggacatcagc aaatctctga ggaatttttc 180  
aaaagtctat ggccctgtgt tcacctgta ctttggcagg aagcctgctg tgggtgta 238

<210> 370  
<211> 260  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(260)  
<223> unsure at all n locations

<400> 370

aaaggaccag ttctgtattg gtggttagta ggctacgttg tcatggtggc ctctggcaac 60  
ccaggtacct gaaaaccagt ttcagggaca gcagtggaga acatactcta ggcaaacata 120  
ctggcctggt tccattataa caagatacct aaggccaact actttnttta ccaagagaag 180  
aggtttgtta cagcacaaga tgagggtggc ccgtcgttag ccttggagg gccatgtgga 240  
aaataacacg tggtagggga 260

<210> 371  
<211> 283  
<212> DNA

<213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(283)  
 <223> unsure at all n locations  
 <400> 371  
 cgcgcgtccc ttaccccggtt ggcgcggcgc atgcgtacga tgagctggat ggcccggtc 60  
 atgtagaagc gaccgtccnc gccacaaacc agcgtggcct cctgcctcaa cgcgggctcc 120  
 acggcggaga ccatgctttg gatgaaatc tcgcatagt tagcgttgc ctggaacacc 180  
 tncactcgt tcgcacccc gctgggtccc ggtctctgat ccggttatgc ctgcgtcttc 240  
 actgtcacga tcttcacat ggtggccggg gctgcgnggc gac 283

<210> 372  
 <211> 273  
 <212> DNA  
 <213> Rattus norvegicus  
 <220>  
 <221> unsure  
 <222> (1)..(273)  
 <223> unsure at all n locations  
 <400> 372  
 gaaaagtcca tgcctatcgt ttacactncc aengngngtc ntgcattgca gcaatacagt 60  
 tggcattccg gaagccaaga ngcctcttta tcagnatcca cganaaaggg natattgctt 120  
 cagttctgaa cgcattggca gaagatgttg tannngctat tctgggtgact gatgggatag 180  
 nggatccctc ggntnngggc acctttgttn tannnggggtg ggcattcctg ggggtgtaaag 240  
 ggtccctgna aacaggttng gggggtngat ccc 273

<210> 373  
 <211> 301  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 373  
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 gcagccctgt ccgcgctatt tatatcttcg ccaagaagaa caatatcccg ttccagatgc 120  
 atactgtgga gctgcgcaag ggtgagcacc tcagcgatgc ctttgcctag gtgaacccca 180  
 tgaagaaggc accagccatg aaggatggtg gcttcacctt gtgtgagagt gtggccatcc 240  
 tgcctacct ggccgacaag tataaggctc ctgacctg gtacccccaa gacctgcagg 300  
 c 301

<210> 374  
 <211> 309  
 <212> DNA  
 <213> Rattus norvegicus  
 <400> 374  
 gggctccat ggatctggtc actttcctgg tacttactct ctctctctc attctctct 60

tactctggag acagagctct aggagaagga agtccctcc tggcccact cctctccaa 120  
 ttattggtaa tttctccag atagatgtga agaacatcag ccaatcetta accaagtttt 180  
 caaaaacctt tggccctgtg ttcactctgt atttgggtc acagcccact gtcattatgc 240  
 atggatatga agcaataaag gaagctctga ttgataaagg ggagaagttt tctggtagag 300  
 gaagctatc 309

<210> 375  
 <211> 298  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <220>  
 <221> unsure  
 <222> (1)..(298)  
 <223> unsure at all n locations  
 <400> 375

gtaccacat gtcacagcta aagtcagga agagattgac cgtgtgally gcagacatcg 60  
 cagcccctgc atgcaggata gaaaacacat gccctacaca gatgcatga ttcattgaggt 120  
 acagagattc attaactttg tcccgaccaa cctgcccac gcagtgcct gtgacattaa 180  
 attcaggaac tactctatcc cgaaggaaca aaagtgttaa catcactgac atcagtgcctg 240  
 catgacagca aggagttccc naaccagag atgtttgacc ctggccactt tctagatg 298

<210> 376  
 <211> 234  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 376

cagacatcgc agcccctgca tgcaggatag aaaacacatg cccctacacag atgcatgat 60  
 tcatgaggga acaaaagtgt taacatcact gacatcagtg ctgcatgaca gcaaggagtt 120  
 ccccaaccca gagatgtttg acctggcca cttcttagat gagaatggaa actttaagaa 180  
 aagtgcactac tttttgcctt tctcagcagg aaaacgagct tgtgttgagg aggg 234

<210> 377  
 <211> 267  
 <212> DNA  
 <213> *Fattus norvegicus*  
 <400> 377

gtcctgacca ggctacgac tggtaaggcg gatgtctatt gtctatgcac taggcgcctg 60  
 gtcgggtgctg ggctcggcga ttttcttac acgaaaaccg aagatgtcag actatgggga 120  
 aatgaagag gatgactcaa gcaatgaaat gcctttttct acaagtgaag actctgattt 180  
 agcgatggaa agggctgagc ctattaaagg gttttatacg aagacaattg taaagtattc 240  
 agaaaattct gttccattac tcaagag 267

<210> 378  
 <211> 249  
 <212> DNA  
 <213> *Fattus norvegicus*

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<220>
<221>      unsure
<222>      (1)..(249)
<223>      unsure at all n locations

<400>      378

aatccggnag aggatccacc tgagacctga ggnccgctta ttcttctttg tcaacaacac   50
tatecctccc accagtgtca ccatggggaca gctgtatgag gacaaccatg aggaagacta   120
tttctgtat g'ggcctaca gtgatgaaag tgtctacggg aaatgaggca gaagcccagc   180
agatggggagc gctgggactt gggggtaggg gaggggtggg tgtgggactt gggaaccag   240
agggaggggc                                         249

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<210>      379
<211>      292
<212>      DNA
<213>      Rattus norvegicus

<400>      379

gaagggagct cagcacgttc agccctgcaa ggggcagtag acaaaattga gagtaaagct   50
cgaagagaga ctgttttaaa gaaaacggca atggatttga tcccaaactt ttccatggaa   120
acctggctgc tcttggttat cagcctgggtg ctctctatcc tatatggaaac tcattcacat   180
cgaattttta anaagttggg aattcctggg cccaaacatt tgcctttctt gggaacgatt   240
ctgcttacag gaagggctct gggaattgac aaatactgac ataaaaata tg           292

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<210>      380
<211>      168
<212>      DNA
<213>      Rattus norvegicus

<400>      380

ctagcccgta tggagttatt ttatttcttg accacgattt taaaaaactt taagctgaaa   50
tctgtacttc acccaaagga tatcgataca actccagttt tcaatggatt tgcctctctg   120
ccaccatttt atgagctgtg ctccattcct ctctaaagag atcaaatt              168

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<210>      381
<211>      298
<212>      DNA
<213>      Rattus norvegicus

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<220>
<221>      unsure
<222>      (1)..(298)
<223>      unsure at all n locations

<400>      381

accagtttct ggttccactc gcagagaagc agagaagcgg agnaagcggc gcgttccaga   50
acctnccggc aagaccagcc tctcccagag catccccacc gcgaaggcan accttctcca   120
gagcataccc cagcggagcg nacccttccc cagagcatcc ccgcgcgcaa gcgcaacett   180
ccagaagcag agagcggcga catggccaag aaaacagcga tcggcatcga cctgggcacc   240
acctactcgt gcgtgggcgt gttccagcac ggcaaggtag agatcatcgc caacgacc     298

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<210> 382  
 <211> 297  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(297)  
 <223> unsure at all n locations

<400> 382

ananaataga agaacaccag gaatcattgg atgtacaaa cctcgtgat tttgttgatt 60  
 attacctgat taaacaaaaa caggcaaaca acatcgaaca atcagaatat tcacatgaaa 120  
 atctgacatg cagtatcatg gatctcattg gtgcagggac agagacaatg agcacaacat 180  
 tgagatatgc tctcctgctt ctgatgaagt acccacaatgt cacagctaaa gtccaggaag 240  
 agattgaccg tgtgattggc agacatcgca gccctgcat gcaggataga aaacaca 297

<210> 383  
 <211> 234  
 <212> DNA  
 <213> Rattus norvegicus

<400> 383

aacgcagccg actctgcagc attgccatgt caggaatgat attgggaatc tttgctgtgc 60  
 tcttgtggg cggcatcatt agtgaagccc tcgggtggcc ctttgtcttt tatatctttg 120  
 gaagtattgg tgtggtctgc tgccttctct ggtcattctt ggtttatgat gacctgtct 180  
 ctcaacctatg gataagtagc ccagaaaagg agtataatct atcctccctg gacc 234

<210> 384  
 <211> 299  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(299)  
 <223> unsure at all n locations

<400> 384

agctgccatc ttgcgtcccc gcgtgtgtgc gccttatctc agctgggtctg cccgagacnc 60  
 tetgagcgtg aaccttagtc cccgcgcgg ccccatcttc actccgacaa gatgaaagaa 120  
 acgatcatga accaggaaaa actcgccaaa ctgcaggcac aagtgcgcac tgggtgggaaa 180  
 ggaactgtct gtagaaagaa gaaggtggtt cacagaacag ccacagcaga cgataaaaaa 240  
 ctgcagtctt ccttaaagaa gttaggggta aacaatatct ctgtattgaa gaggtgaac 299

<210> 385  
 <211> 291  
 <212> DNA  
 <213> Rattus norvegicus

<400> 385

ctgacgttgt ctatagaaca gtggccaacc ttcttgatg tgagcagggtg gactccaagg 60

ctctggtgaa ctgtctacga ggcaagagcg aggaagagat tatgtctatt aacaaggcct 120  
 tcaggatcat ctctggcata gtggatggta tcttccctcc cagacatccc aaggagctgt 180  
 tggcctctgc tgaatttcac cccattccca gcattattgg tgtcaacaat gatgagtatg 240  
 gctggatcat tccctcgagc atgaccacca ctgactccaa gaagaaaatg g 291

<210> 386  
 <211> 304  
 <212> DNA  
 <213> Rattus norvegicus

<400> 386  
 actgagtggg cctgtgaaga atccaaattc caaataattt tcaacatgga ttcccgtgaa 60  
 tcccgagaaa gaggggaagga gatgggtggat tatatagctg actatctgga cggcattgag 120  
 ggaagtcacg tgtacctga cgtggagcct ggctaccttc gggccctgat cccaccact 180  
 gcccccagg agccagaaac atatgaggac ataactagag acattgaaaa gataatcatg 240  
 ccagggtcac acactggcac agccctact tcttggttta ctccccagg ccagctccta 300  
 ccca 304

<210> 387  
 <211> 264  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(264)  
 <223> unsure at all n locations

<400> 387  
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 gatcatggct gccgaggatg tgggtggcgac tggngncgac cccagcgagc tggagggcgg 120  
 cgggctgctt caanagatnt tcacgncgcn tctcaacctg ctgctccttg gccatgcac 180  
 ttctgctct acaagatcga tcgcnngggac cagcccggtg ccaatgggga caacnactcc 240  
 gacgagnngn ccncgctgnc nong 264

<210> 388  
 <211> 267  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(267)  
 <223> unsure at all n locations

<400> 388  
 cggaaacagtc gaggctagat tgacacagct gtccgttcag accccagcac catgcccattg 60  
 aactggggtt actggganat ccgtggggct agcgcattgcc atccgctgc tcttgggaata 120  
 cacagactcg agctatgagg agaagagata caccatggga gacgctcccg actttgacag 180  
 aagccagtgg ctgaatgaga agttcaaact gggcctggac ttcccacatc tgcctactt 240

aattgatgga tcacacaaga caccag 267

<210> 389  
 <211> 307  
 <212> DNA  
 <213> Rattus norvegicus

<400> 389  
 gtgccttcac gcagcttaat gtggcctttt cccgggagca ggcacacaag gtctatgtcc 60  
 agcactttct gaagagagac agggaacacc tgtggaagct gatccacgag ggcggtgccc 120  
 acatctatgt gtgcggggat gctcgaaata tggccaaaga tgtgcaaaac acattctatg 180  
 acattgtggc tgagttcggg cccatggagc acaccaggc tgtggactat gttaagaagc 240  
 tgatgaccaa ggccgcctac tcactagatg tgtggagcta ggagcttacc aacctccac 300  
 acctggg 307

<210> 390  
 <211> 248  
 <212> DNA  
 <213> Rattus norvegicus

<400> 390  
 tcttgagaaa ggcattgccc gaagtgaatt gtctcttttc ttcactacca tctccagaa 60  
 ttaactcagtg tccagccctg tggactctaa caccattgat atgactccca aggagagtgg 120  
 attagccaaa gtageccccag tgtacaagat ttgctttgta gcccgctgat tgtgctgagg 180  
 cagtcagcgc actcaattct gtccaaaatg gccccatttt tctgattctg ggagacctgc 240  
 tggagacc 248

<210> 391  
 <211> 283  
 <212> DNA  
 <213> Rattus norvegicus

<400> 391  
 atgggttttg accctgtcat tccctgtgga gagctgggtg cagaagtact tcagatccct 60  
 tttgtaaaaa cattgaggtt cagcatgggc tactccatgg agaaatactg cggccaactt 120  
 ccagttccac tttcgtatgt accggttgtc aggggtgaact aacagaccat atgaccttta 180  
 cagagaggggt gaaaaaatatg atgctttcac tgttttttga gttttggctc cagcaatatg 240  
 actttgcatt ctgggatcag ttttacagta aaactctagg aag 283

<210> 392  
 <211> 290  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(290)  
 <223> unsure at all n locations  
 <400> 392



ggactatctc cccctaagtg ggaagggctt agtcaaatgc agtanagagc tataaaacac 60  
 cgagaactct tgatgtgttg tgaacttag agggagcagc tttttaacaa gagaactcaa 120  
 gcaattgctg ccatgccggg gaagccagtc cttcactact tccatggcag ggggagaatg 180  
 gagcccatcc ggtggctcct ggcgcagct ggagtagagt ttgaagaaca atttctgaaa 240  
 actcgggatg acctggccag gctaaggaat gatgggagtt tgatgttcca 290

#210 393  
 #211 281  
 #212 DNA  
 #213 Rattus norvegicus

#220  
 #221 unsure  
 #222 (1)..(281)  
 #223 unsure at all n locations

#400 393

ctgcaaggct gtgttcagc gcccggaagg ctcactgttc cgaaatggcc 60  
 ggcagtcag acaaggatgt gaagtactac actctggang gagattcaga agcacaaga 120  
 cagcaagagc acctgggtga tctacatca taagtgtacg atctgacca gtttctcgaa 180  
 ggcctctctg gtgggggaaga agtccctaaga gagcaagctg ggggtgatgc tactgagaac 240  
 ctgagagcgt cggggcactc taacggatgc acgagaactg t 281

#210 394  
 #211 287  
 #212 DNA  
 #213 Rattus norvegicus

#220  
 #221 unsure  
 #222 (1)..(287)  
 #223 unsure at all n locations

#400 394

ccctgtggtta tgcctaggtc ctggaactgt acctggatct gctgtcgcag cccgtgcgcg 60  
 ctatttatat ctccgccaa gagaacaata tcccttcca gatgcatact gtggagctgc 120  
 gcaagggtga gacctcagc gatgctttgc ccagtgaacc ccatgaagaa ggtaccagcc 180  
 ctgagggatg gtggcttcac cttgtgtgag agtgtggcca tctgtctcta cctgggcgcac 240  
 aggtataagg ttctgacca ctggtacccc caagactgca ggcccg 287

#210 395  
 #211 243  
 #212 DNA  
 #213 Rattus norvegicus

#400 395

aagagaatcg cattaaagag aaagaaaagc aaagaatgga ctttcttcag ctgatgataa 60  
 actccagaa ttccaaagtc aaagactctc ataaagcatt atccgatgtg gagattgtgg 120  
 cccagtcagt tatcttcatt tttgccggct atgagaccac tagcagtgtc ctttctttg 180  
 ttttgtatct gctggccatt caccctgata tacagaagaa actgcaggat gaaattgatg 240

cagctctccc caataaggca catgccacct atgataacct gctacaaatg gag 233

<210> 396  
 <211> 166  
 <212> DNA  
 <213> Fattus norvegicus

<400> 396

gttgccctcc caataagtag ggtaacatt tagtcaaat atgcgattgt tgcaaagctt 60  
 tgaaggctg gctttgtggg tacagtgtat ccatagatgc ctgaattaac tgaagatctt 120  
 aactgcagat tctacacatt tctcctctc taatggcttc ctctggctgc ccagggtga 180  
 agaaacttct tcactgtggg gaggttgctg actctggctc tccagggcct cagcagaggg 240  
 aagttgggca aagcgtgggg tccact 286

<210> 397  
 <211> 200  
 <212> DNA  
 <213> Fattus norvegicus

<400> 397

gtcaaatggc taccacaaa cgatctgctt ggtaaccaa aggcctgggc gttcatcaca 60  
 ccttcgggtt ccatgggtat ttatgaagga atatgcaatg gggitccaat ggtgatgatg 120  
 ccttgttttg gtagtcagat ggacaacgcc aagcgcattg aaactcgggg agctgggggtg 180  
 accttgaatg tcttggaat gactgccgat gatttggaaa acgcccttaa aactgtcctc 240  
 aatacaaga gttacaagg 289

<210> 398  
 <211> 262  
 <212> DNA  
 <213> Fattus norvegicus

<400> 398

gaaactttta gaaagtga cactttttgc cttctcagc aggaaaacga gcttgtgttg 60  
 gagaggggct ggcctgcatt cagttgttct tattcttgac aaccatttta cagaacttta 120  
 acctgaatc tctgggtcac ccaaaggaca ttgatacgtg gccagttctg aatggttttg 180  
 cctctctgac accaacttac cagctctgct tcatctctc ctgaatagat caggcatttt 240  
 ggctctactg tg 252

<210> 399  
 <211> 272  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(272)  
 <223> unsure at all n locations

<400> 399

gngagccaat ggcctctctc atttttctgg ggatttggcn ttcttntttg gtttttcttt 60  
 ttctatngaa tcagcaccat gtcagangga agctcccacc nggtcccact cctctaccaa 120

tttttggcaa ttttttgcga ntgggtgtta aaaatatcag caaatctatg tgcattcnag 180  
 cgaaagagta cgggcctggn tcaccatgta tctgggcatg aagcccactg tgggtgctgta 240  
 tggatatgaa gtattgaaag aagctctgat tg 272

<210> 400  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<400> 400

catcgtggg ctggctcagc ccattcgctt gttcctggag tatacagaca caagctatga 60  
 ggacaaagaag tacagcatgg gggatgctcc cgaactatgac agaagccagt ggctgagtga 120  
 gaagtcaaaa ctgggcctgg acttccccc aa tctgccctac ttaattgatg ggtcacacaa 180  
 gatcaccag agcaatgcca tcttgcgcta ccttggccgg aagcacaacc tttgtgggga 240  
 gacagaggag gagaggatcc gtgtggacgt tttggagaac caggctatgg acac 294

<210> 401  
 <211> 276  
 <212> DNA  
 <213> Rattus norvegicus

<400> 401

gttgagagca ggtctgaccc attgctctct ctgctcagag tccccaggt ctgaagtctg 60  
 cctgaaagat gtcagccctc aaagctgtct tccagtacat tgacgaaaac caggaccgct 120  
 ttgtcaagaa acttgcagaa tgggtggcca tccagagcgt gtccgcgtgg ccggagaaga 180  
 gaggagagat cagaaggatg acggaagcgg cagtgcagat gtccagaggc tgggggggac 240  
 tgtgyagctg ctggatatcg ggaagcagaa gctccc 276

<210> 402  
 <211> 271  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(271)  
 <223> unsure at all n locations

<400> 402

ctgacctgac ccattgatgta agggncctga ggggagcacc accactgcaa aggctgacta 60  
 aggnctgttn ggetaaaggt ctttttgaag cccagtgtct anagtcacac cttcttttgc 120  
 ctgggcccag gaggcctact tcttcttttt ctctnggaat cctggaatct taaagataaa 180  
 agaacctaga aagaaaatca aaccacttt ccttgtgggg cagatggtaa tatgggactg 240  
 aqaacagcaa acctgggggc ttggagagga g 271

<210> 403  
 <211> 253  
 <212> DNA  
 <213> Rattus norvegicus

<400> 403  
 cgcactgtctc ctaggggcaag agccttcacc tcttctacag ccaacacccat gcgcgagatc 60  
 gtgcacatcc agggcgggcca atgcgggcaac cagatcggcg ctaaggcaac aaatatgtac 120  
 ctggggccat cctagtggac ctggagccag gcaccatgga ctcagtgagg tggggaccat 180  
 tgggcagat ctccaggcca gacaactttg tgttcgggtca gagtgggtgca ggaaataact 240  
 gggcaaaggg cca 253

<210> 404  
 <211> 312  
 <212> DNA  
 <213> Rattus norvegicus

<400> 404  
 cagctggctt cctacatata gtctgtgaa agagatcaga gagtgaaga aagatggcgg 60  
 gggatccaag ccgctgggct gcagtctccc ttctctctgc ctgtcagcaa aqttattttg 120  
 ctttgcaggt cggacgagta agattaaaat acaagatcgc acctccagca gtcacgggct 180  
 ctctggagtt tgagagaata ttctggccac agcaaaaactc ttggagttt tattccgtat 240  
 tcatcatatc gctgtggatg gctggatggt atttcaatca agtttttgca acctgtctgg 300  
 gctctctgta ca 312

<210> 405  
 <211> 245  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(245)  
 <223> unsure at all n locations

<400> 405  
 ctggcggctg ctctctgagc ctctctggc tctgtgtctc tgtctcagc ttccacgtcc 60  
 tggcccgacn gcgccatgga gggttaccat aagccagatc agcagaagct ccaggccctg 120  
 auggacacag ccaatcgctt gcgcacagc atccanncca ggcaccacc gcggcaggcg 180  
 nggacacccc acatctttna gtagecgngn cggagagcng gtcgnnctgn tattnnnnac 240  
 caggc 245

<210> 406  
 <211> 299  
 <212> DNA  
 <213> Rattus norvegicus

<400> 406  
 tcatacccaa gggaacagca gtactaacat cacttacatc agtgctgcat gacagtaagg 60  
 aattcccaa ccagagatg tttagaccag gtcactttct agatgagaat ggaaacttta 120  
 agaaaagtga ctacttcacg cctttctcag caggaaaacg gaaatgtgtg ggagagggcc 180  
 ttgccagtat ggagctgttt ttgttctga ccaccatttt acagaatttc aaactgaaat 240  
 ctctgtctga tccaaaggac atcgatataa actcaatacg ttctgagttt tcatcaatc 299

<210> 407  
 <211> 290  
 <212> DNA  
 <213> Rattus norvegicus

<400> 407  
 ggaaggggaa gaatgccagt ttttgaaaag gctactaaag gactgggcat tagtttttagc 60  
 cgtggaaatg tatggagagc cacaagacat ttcacagtca ataccctgag gagtttgggc 120  
 atggggaaac ggaccattga gatcaaagtg caagaggaag cagagtggct agtgatggaa 180  
 ctgaagaaaa ccaaaggctc accctgtgat cccaaattca tcataggatg tgctccctgc 240  
 aatgtcatct gctccattat cttccagaat cgtttcgatt ataaagataa 290

<210> 408  
 <211> 221  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(221)  
 <223> unsure at all n locations

<400> 408  
 catcagttct gtgttcaaag ttaacatcag agataatggg ctctcgnent cncntccent 60  
 ttttgntngc tngggcantg gnaaccngga agnccnttgg aganttccan aaaagaaaaa 120  
 atttaggggc acaaatgtga gaaaaancnt cacaancttn gggnanannc cccctgntgc 180  
 gccnttgtg gggctgccct atgtccaate cagctatatt g 221

<210> 409  
 <211> 116  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(116)  
 <223> unsure at all n locations

<400> 409  
 attttgagat ggaacgattt gaagtcttgg gtgtccctt cagtctcaa ctttgggaca 60  
 ctgtgtgtca ggagagggtc aagtgcacg cttccacaca acatangagn gnnatt 116

<210> 410  
 <211> 275  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(275)  
 <223> unsure at all n locations

<400> 410  
 cacagccctt accagencac cctccataac tgcaccaaga ggatctatcc aacacctccc 60

tgagcaggag gagcctgaag actccaaggg aaagagctct gaggaacctt ttctgtgca 120  
gttgatcta accacaaacc cacagggtga cacactggat gtctcttcc tetactgga 180  
gctgaggaa aagaaactgg tggctctgcc ttctctggg aaggaacagc gctccctga 240  
gtgcccggg cccgaaaagc aaagaacccc ctgat 275

<210> 411  
<211> 300  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(300)  
<223> unsure at all n locations

<400> 411

ccctcttcaa tctctacgc ttccctctgt ccctgcttcc catgggtgncc tcctcgatcc 60  
tcacaggccag tgtttctgtg gaccggtg agaggtatlll gggaggagac gatttagaca 120  
catctgccat tcgccgcgtc agcaattttg ataaagctgt gaagttttca gaggcctctt 180  
ttacttgggc ccggacttgg aagccacaat ccaagatgtg aacctggaca taaagccagg 240  
ccaatgggtg ctgtggtggg cactgtagct ctgggaaate ctctttggta tcagccatgt 300

<210> 412  
<211> 286  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(286)  
<223> unsure at all n locations

<400> 412

cnagaagtta gtggagtact tgaagcagag ttctgtgatg ctgtgtttct ggatcctttt 60  
gatgtgtgtg ggctaactgg tgccaagtac ttctctccc gtcagtggtc ttcagcaggg 120  
ggatattttg tcaatatctt gaagaangct ccagtgccc cagtcctcct tcatatgtcc 180  
ccagagggtat cttgaaactc acagatacca tgactttcaa ggaaagagtg tggaaactct 240  
tctctaattg gggagcatgc attctgtccc agtttttcaa aactgc 286

<210> 413  
<211> 272  
<212> DNA  
<213> Rattus norvegicus

<400> 413

agagaagcct gctgaggaaa cactggaaag ccttacctca ggcactaagt tgaaggaaaa 60  
acgacaatgg ccacaatggt agaactgagc cctacaagtg agcagtgtga gtttgtccta 120  
ggcttgccag tgaataagaa gacccctccc cggaaagtcc cgagtattatg ttccatgcgc 180  
tattcaatag ccttcacgc acatatctgc aacttcacat tgatagcaca gaattccatc 240  
ataagcatca ccatggtagc catgggtcaac aa 272

<210> 414  
 <211> 103  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(103)  
 <223> unsure at all n locations

<400> 414

agctccgggg gaggtcgccc acatccttca ggntgaaagc tgcagtgttg gctgtggccc 60  
 tgggtcttct gacaggttgc caagcttggg agttctggca gca 103

<210> 415  
 <211> 273  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(273)  
 <223> unsure at all n locations

<400> 415

aagcccttia aaactgtcat caataacaag agttacaagg agaacatcat gcgcctctcc 60  
 agccttcata aggaccgtcc tctcgagcct ctggacctgg ctgtgttctg ggtggagtac 120  
 g'gatgaggg acaaggnngc gccacacctg cgcctcgccg cccacgacct cacctggtag 180  
 cagtaccact ccttggacgt gattggcttt ctcttgccca tegtgttgac ggtggctctc 240  
 atgtctata aaagttgtgc ctatggctgc cgg 273

<210> 416  
 <211> 106  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(106)  
 <223> unsure at all n locations

<400> 416

gaagannnac ctggacaccc agactgttgg agancntccg ggggatgtcg ctcacatcct 60  
 tcaggatgaa anctgcagtg gtggctgnag gnnctggtct nctga 106

<210> 417  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(294)  
 <223> unsure at all n locations

<400> 417

cactaaagca aagcagacaa ctccagctct ccacacagct ggtctctgac accttggggg 60

acacaagggc cctagctatg gactgagtat tccacagaca cctatgggta ccttggatac 120  
 tgccaaaast cttaaataca tggactttta cctcagaaac ttgtcttcag atatectggt 180  
 aatcttcagt ttttgtttgt ttttgttttt nggaggaagg cctctctcta tgtagctatg 240  
 gctgtcttag aatcaactctg tagatcaggc tggcctcaga ctcatgcctc tgct 294

<210> 418  
 <211> 262  
 <212> DNA  
 <213> Rattus norvegicus

<400> 418  
 cgagagcttcc aggtagcggg cggtcgcagt ctgtcccagg gtacgaccgc gccttgggca 60  
 cagatctggg gaccgggggc tgctctttta agggaggggg tggagccacg agtgaggatc 120  
 gaaangetcc agaaaacttg aggcacagac cccgcaccag ggtgcagcca tgagtgcgga 180  
 ggtgnaaggtg agagggcaga accaggagca atttctgctc cttgccaagt cggctaaggg 240  
 ggcagcaactg ggcacactca tc 262

<210> 419  
 <211> 145  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(145)  
 <223> unsure at all n locations

<400> 419  
 acacaaagen atttanantg ccagactata cttggtttaa aggaatacct tttcatgnet 60  
 ctgggattca aaagncactt tncaaaaatg tnnngnaana attttgggn cnanccccga 120  
 ntcatntga naggcttanc ccagt 145

<210> 420  
 <211> 271  
 <212> DNA  
 <213> Rattus norvegicus

<400> 420  
 ctccaacctg gtgcgcacc agcgggtgca caccggggaa aagccgtatg tctgcagcca 60  
 gtgtggcaag gcttcatct ggagctctgt gctcatcgaa caccagcgca ttcacacagg 120  
 cgagaagccc tacaagtgtg aagactgcgg caaggccttc cgaggacggt cgcatttctt 180  
 ccggcactta cggaccocaa cgggcgagaa gcccttctcc tgtggctcct gtggcaaagc 240  
 gtttggccag agctctcagc tcatccagca c 271

<210> 421  
 <211> 282  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(282)



<223>        unsure at all n locations

<400>        421

cagttagaag ttectgggna ggccctgtgt agaccacagcc tagctgagta ctgattcatt    60

ttgagtgtgag tgggaagaat gggggagatt cgcagctttg tectcatcac tgttgctctg    120

attctgggca aggagagctg ggtccctcgga gatgagaact gtttcagga gcaggtgagg    180

ctcagggctc aggtgcgcca gcttgagacc cgggtcaaac aacaacgggt ggtgattgca    240

cagctcttgc acgagaagga ggtccagttc ctggatagag ga                            242

<210>        422

<211>        222

<212>        DNA

<213>        Rattus norvegicus

<220>

<221>        unsure

<222>        (1)..(222)

<223>        unsure at all n locations

<400>        422

ctgaagacca acttgctctc agtgagcagc tgtgtgcagc aggtggtgga gcttctgcaa    60

gancagagca ttgttcccca caccaccatc aaaggcatcc atgaactctt tgtgccggaa    120

aacaaaattg atcaaatccg agtgagtta gagactctcc catcactacc aattaccaag    180

ctggatctgc agtgggtgca gattctgagc gaaggtctgg cc                            222

<210>        423

<211>        275

<212>        DNA

<213>        Rattus norvegicus

<400>        423

gagaaaggcc accacctagc taggtgaggt gtgccagcat ggtccctgggg gtctcactgt    60

cccugccctt gggagctgg ttccgccatg caatcccttt cgtatcttc acgtgtttac    120

ttctttatat cagtgtatgg ctcttccatg agtggccctt tgagttgcca gctcaaagaa    180

ctcagcagtc cggcctgtgg gaactcaagc tctcttctcc ttctccagcc ctcacctctc    240

tgttctctgt cacctcaggt gttttacaag gctga                                    275

<210>        424

<211>        279

<212>        DNA

<213>        Rattus norvegicus

<220>

<221>        unsure

<222>        (1)..(279)

<223>        unsure at all n locations

<400>        424

attcttcatt gcatgatgcc ttcaataaaa gggcaacgtg aatacagttt ataaatcaac    60

gagtatttta agccttgttt aaaacatctt ttactccan nnnnnnnnnn nnnnnnnnnn    120

nncaaaactaa atcattgtag ctacacctgta atatacgtag tagttgacct ggaaaagttg    180

taaaaataatn gctttaaccg acacgtaaatt atttcagata aacattatat tctttgtata 240  
 taaaanaaag aaaannangn caatggnga atnaactct 279

<210> 425  
 <211> 238  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(288)  
 <223> unsure at all n locations

<400> 425

gtgttcgcag ntccccagca ctcttgccga aggactcttg tccttctcta ccagagcagc 60  
 atangaggga atggctgccg tgtctccacc taccagatgt caggcatcgg tgacgtttga 120  
 agatgtggct gtgaccttca cagatgacga gtggaagcgt ctggtaccca tgcagagagc 180  
 actctacaag accgtgatgc tggagaacta tgagagcctc atctctctgg ggcctcccg 240  
 tctctgacct gatgtgattc ttcagttcaa gagaaggggc gaatcctg 288

<210> 426  
 <211> 236  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(286)  
 <223> unsure at all n locations

<400> 426

gtctgggctg gagctaaagg acacacagna gcaagtcac agatccgtga tgagtcacc 60  
 gggggcagga ctganggcc aatctcttg cactctgacc tgggtcagcc tgacagctgg 120  
 ggaccgcgta tacatccacc cctttcactt cctctactac agcaaganca nctgcgcccc 180  
 gctggagaac cccagtgctg agaagctccc agagccaacc tttgagcctg tgccattca 240  
 ggccaagacc tccccctgg atgagaagac cctgcgagat aagtcg 286

<210> 427  
 <211> 235  
 <212> DNA  
 <213> Rattus norvegicus

<400> 427

gaggattcac tcacatttgc ttcccgtgg ccatgagtga gctgcccttt ctgagtcag 60  
 agggagccag agggcctcac aacaacagag ggtctcagag ctccctggag gaaggctcag 120  
 ttacaggctc agaggctcgg cacagcttag gtgtcctgaa tgtgtccttc agcgtcagaa 180  
 cctgtctggg ccttggtgga acatcaaata atgccagcag aagtgggaca ggaaa 235

<210> 428  
 <211> 249  
 <212> DNA  
 <213> Rattus norvegicus

<400> 428  
 cccgtggttct ggaagtggag atcgtgagtc atggtgtgtc cccgagacgc agagatccac 60  
 aaggacgttc agaactacta tgggaatgta ctgaagacat ctgcagacct ccagactaat 120  
 gtttgtgtca cccagaccaa gggggtcctt gattacatcc ggaaaagtct gcagaatgta 180  
 catgaagaag ttatttccag gtattatggc tgcggtctgg tgggtgctga gcattctggaa 240  
 aattgcggg 249

<210> 429  
 <211> 233  
 <212> DNA  
 <213> Rattus norvegicus

<400> 429  
 ctgaacttga ccaaagggag actcaggttg gaaacaaaat cccagggatg atacacggaa 60  
 aaactccatt aggcacagtg acatacatgt gtaattcaaa cgtgtcactt gagagactga 120  
 ggcaggagga gatctatcga aaggttgaga ccaactagct gtaggctagc ctgggctatg 180  
 ctgttaagac cttgtcacia agtacaagaa gggagaataa aagaatattt cct 233

<210> 430  
 <211> 287  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(287)  
 <223> unsure at all n locations

<400> 430  
 tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttgttgt tttgttatgt 60  
 gtgcacatct atgttttcat atctaccggt tgggtatgac tttgtccctg ggtagggact 120  
 ggctctcttg acaagtagat gtccgtttag cctgcagaca tcacatgact ctcaagaacg 180  
 aatcgtgtat cctgggtccct gtcctgtgtc atgcacatte cctcctctg tcccagggca 240  
 gagggcaaggg tgtgtgaggg ctatgggcag aggccatatt gtgaaga 287

<210> 431  
 <211> 183  
 <212> DNA  
 <213> Rattus norvegicus

<400> 431  
 ctaaaattaa gatagagtga atgagacaga tatctgtaga cactgtattt tcttgtgtga 60  
 tcagatctag tgtgggtggat gatagaagt gaacttgctt tattgtctatg tgttaaaata 120  
 tttgtttgc attaaatggc ctattgaaat gcttttctgt tctataata aaataacctg 180  
 atg 183

<210> 432  
 <211> 287  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221>       unsure  
 <222>       (1)..(287)  
 <223>       unsure at all n locations  
  
 <400>       432  
  
 tcaaaagcat atgtgctggca cagagtggac ntgatggctt ttgttgttgt ttgttatgt   60  
 gtgcacatct atgttttcat atctaccggt tgggtatgcc ttgttccctg ggtagggact   120  
 ggctctctgg acaagtagat gtctgttag cctgcagaca tcacatgact ctcaagaacg   180  
 aatcgtgtat cctggtcctt gctcctgtgc atgcacatct cctcctcttg tcccaggcca   240  
 gaggaagagg tgtgtgaggc ctatgggcag aggccatatt gtgaaga               287

<210>       433  
 <211>       283  
 <212>       DNA  
 <213>       Rattus norvegicus

<220>  
 <221>       unsure  
 <222>       (1)..(283)  
 <223>       unsure at all n locations  
  
 <400>       433  
  
 ctggntctca cacttnttgc tgagnannng gctgnttgtt accccagag atccctnctg   60  
 ttggaccttc accagtceng gggnggctgg gactcccaca cctcaagccc gagctatgac   120  
 ctacattcca ctgctgggag aagagaggcg gggcccagag tatcctgccc ttgggagtea   180  
 aagaacctag gngccaggct ggcacaggga tggggaggct ggncctttat aaatatnata   240  
 tgcagannaa aagannaaaa naagggcggc cnccgacaag nna               283

<210>       434  
 <211>       295  
 <212>       DNA  
 <213>       Rattus norvegicus

<400>       434  
  
 aagatcggaa gaatcacagg gctggaccct gcaggacctt tgtttgaggg aacttcccc   60  
 aacgagcgcc ttctccaga tgatgcaat ttgtggatg ctattcatat ctttaccagg   120  
 gagcacatgg gtctgagtgt gggcatcaaa cagcccatgt cccactatga cttctacccc   180  
 aacggggggt ccttcagcc ttgctgccac ttctggagc totaaaaa cattgcagag   240  
 catggyctta aatgccataa cccagaccat caaatgtgcc catgagcgtt ctgtg       295

<210>       435  
 <211>       133  
 <212>       DNA  
 <213>       Rattus norvegicus

<400>       435  
  
 cctgattctt ttgtctgtat agccctggat gtgtaatgca gacattatct aactgttgt   60  
 ggtaaccttg acatcacaga actgctagtg aacgaggtaa aaataataaa ggtacaacca   120  
 gtgcacgca aaa   133

<210> 436  
 <211> 212  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(212)  
 <223> unsure at all n locations

<400> 436  
 accacagatt tcgaagctgg ccggtcttgt cttaggtcga tggagaagac aacggcatct 60  
 tcaacagcgc acaggaacgt gcagggagag tctggttcta gggccaactt gtgggatget 120  
 cctctagctt gggccacacg cttggtgttc ttgcagcact gtgtagcang cttctcttgc 180  
 gacttggacc tgcccatccc ggcacacata gc 212

<210> 437  
 <211> 291  
 <212> DNA  
 <213> Fattus norvegicus

<400> 437  
 ttttaataag taatgacgcg gtccttttcc taatccctaa aaacctgtct cataaagtgt 60  
 aatgggggag cagccctttt ggtgttgcaa aatgaagttc caggcttcta aaatgttgcc 120  
 atgtattgaa aggagctaata gccattgtaa atgttattag ttccacattt cttgagcage 180  
 cttaggtaca gggagaacat ttgtagatct tgtaatgatg tattgtgctg tggaagtact 240  
 ggtgttgaat agcagtagtg gggcaaaaag caatcttgtc attggaatgt a 291

<210> 438  
 <211> 262  
 <212> DNA  
 <213> Fattus norvegicus

<400> 438  
 ggataaatga gacggctcgg gtcgagtgc tttgcagggg actcgggttt ggttcccage 60  
 gtcacgcttg ggcagcacac aagtgtccgt aactctagct ctatgggac tgacccattt 120  
 ctggcctctt cagcacctgc aaaaatgtgg cagacacata tacgcttaag taaaaataat 180  
 taaaaaaaac gaatctttaa aacatttttt aaaagaagtg atggagtga ttcctgcctt 240  
 atggcctgct ggaaatggaa ca 262

<210> 439  
 <211> 272  
 <212> DNA  
 <213> Fattus norvegicus

<400> 439  
 tgggtctttt tcaactgggac acttgggaca ccgctgagtt actaacagct ttgtttacac 60  
 agtaggaaga ggggcacaga gagctgtgcc tctatggtga gcctctggga ctgaagtgtg 120  
 ccacgaactag tgggttgaca cctggggaggc tggctaccta cctgtcttac tccctgaagg 180

acagggttga atctctgggt tccagtcctt agggagatgg agtactgtct gtcagctgct 240  
ggctgtgctt ttgaagagg ccaaattgtt tc 272

<210> 440  
<211> 234  
<212> DNA  
<213> *Fattus norvegicus*

<400> 440

acagaaccca acctgctact aatcacggag aagaatgtgg aggacaagaa taaggctaga 60  
agccagagca agtgaggact gagcaaggga agggagaacc gattgccatc ggccttcctg 120  
ctctggttag ggtgaggttg gggccaagag gactgggect ggcagatctt caagtcattg 180  
ggaagatgga gataaccctg taggggtgaa caccgggaga cctaggagat cccctcccca 240  
ccctttctct tygctccga ttcactcctg tccgttccc tgac 284

<210> 441  
<211> 233  
<212> DNA  
<213> *Fattus norvegicus*

<400> 441

ctgaacttga ccaagggag actcaggttg gaaacaaaat cccagggatg atacacggaa 60  
aaactccatt aggcacagt acatacatgt gtaattcaaa cgctgcactt gagagactga 120  
ggcaggagga gttctatcga aaggttgaga ccaactagct gtaggctagc ctgggctatg 180  
ctgttaagac ctgttcacaa agtacaagaa gggagaataa aagaatattt cct 233

<210> 442  
<211> 273  
<212> DNA  
<213> *Fattus norvegicus*

<220>  
<221> unsure  
<222> (1)..(273)  
<223> unsure at all n locations

<400> 442

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tccattcaga gcaagtgttt gcncttcgcc tgcaggacaa aaaacttccc cctctgctct 120  
ccgagatctg ggatgtccac gaatgactgt ttctccgtgt cctcngtggt ggcaaggcag 180  
ctgaagttac nganngcttc nnngaagngg nanannctgg ggagagaaaa nntncagggg 240  
gncgaggaaa agagacnctt ntnnngnaan aag 273

<210> 443  
<211> 264  
<212> DNA  
<213> *Fattus norvegicus*

<220>  
<221> unsure  
<222> (1)..(264)  
<223> unsure at all n locations

<400> 443  
gnaagaagga aggtttctctc ttacactgct tctatctact tgcacgcaca tctgttgga 60  
tctactaacc ttgtgagatg gagtaactac tagatccttg gacttccac tcatagtga 120  
tcttltgttag ggggttggaac tacagactgt aaatcatcat aacaaactcc cttactgtat 180  
agaggctatc cataagttct gtgactctag agaaccctga ctactacaga cctgtttca 240  
aaaaagaagc aaaagttagc tggg 254

<210> 444  
<211> 283  
<212> DNA  
<213> Rattus norvegicus  
<220>  
<221> unsure  
<222> (1)..(283)  
<223> unsure at all n locations

<400> 444  
gaggaatcca atttttctgag ctccacaagc cactctgcan nntcagatag tcaccagggt 60  
cactacagga ggaattgttc catctgagag acccagcatg cattatactc gctgtctgct 120  
gcttctctctg gctggactct tggaaactctc tcacagtcag ccagaccaag aagagcctga 180  
caatacaacc aacaaaacct acagttgttc tcacagcaga acatctccag ctaccagatt 240  
gctcttgga atgccaactt tgccttccgc ctctaccacc tga 293

<210> 445  
<211> 290  
<212> DNA  
<213> Rattus norvegicus  
<220>  
<221> unsure  
<222> (1)..(290)  
<223> unsure at all n locations

<400> 445  
gaaattcaat ttgggttttc aaaattgatt ctttaaganan atataccccc ataaggaaat 60  
aatatcacia tctcataagg natggggaat acagacnagg tacnttttca ggcacattca 120  
gtgtaaaat atgtagtcct ttatactggn atattaaata atattatatt tgtgaagaca 180  
gagatttatg tcttacaatg taaatganaa acagacaaac ctaatcagat atctggctgg 240  
tgaagccatt ggtcagtgtt aggaatttcc agtcaggaga agaccctcta 290

<210> 446  
<211> 165  
<212> DNA  
<213> Rattus norvegicus  
<220>  
<221> unsure  
<222> (1)..(165)  
<223> unsure at all n locations

<400> 446  
ggggaaacac attcaaagaa gaatcaggaa gagggatgtg ataggggtgct tatggatggg 60

aaaccgagaa agganataac atttgaaatg taaatgaaaa atatccaatt aaaaaaaaaa 120  
 aancaaaaccc tgcccagant ttgcccngng ngacaaaaan agaga 165

<210> 447  
 <211> 173  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(173)  
 <223> unsure at all n locations

<400> 447  
 gggaggngcc ctttttccca ccaccagaag agtttgtgtt catccatgct gtacctgttg 60  
 aggaacgtgt ggggaactgca gtcctccca agaccataga ggagtgtgag gtgattctga 120  
 tggltgggact tcttgatct ggaaagaccc agtgggcact gaaatatgca aaa 173

<210> 448  
 <211> 189  
 <212> DNA  
 <213> Rattus norvegicus

<400> 448  
 gttattaagg ataaactgtt taatcaaatt aacgttgctt agttactgct gagtactctt 60  
 cttcagagct ggcgtgcgga aggagaagaa gctcaaggaa cattctaacc cagttaccag 120  
 aactagata gaagactaag gtgctgtgtg acgtctgag tattagcact gtaataaaac 180  
 tgtcacatg 189

<210> 449  
 <211> 165  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(165)  
 <223> unsure at all n locations

<400> 449  
 gtattttnc c agancaganc gtgtattgaa acataaacgt atgtgccatg aaaatcacga 60  
 caaaaaacta nncngatgtn ccattcaaan gtggccttct gtacatcana ggnagattct 120  
 ggctttctac ggcaccagaa gntgtttcac tggcnanaan aaant 165

<210> 450  
 <211> 184  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(184)  
 <223> unsure at all n locations

<400> 450



cnggggggaca attaaaggga ctgtgcgtac gtttctctca tgaatgaagg aagctgtctg 50  
 aacaaagaat tactgattca gctacgcagc agaacatag tgcctactc tttcaagatt 100  
 aataatcttg ctttatgtca tattgtatat ttaatcttag tctgttgeng gggagggctt 150  
 atgc 184

<210> 451  
 <211> 271  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(271)  
 <223> unsure at all n locations

<400> 451

tgcagccctt cctccggggg cattctgttt ccagnccact tgggctatg tagtcctctc 50  
 tctgtgtctg aggcctggcc cagtcacaa gcatttccct ccagaccac aacctccagg 100  
 gactgggaca aactggggca ggatgatttg ccacttgctt ggcccgtga tcccagccc 150  
 atacctctcc tctctactct ccaggagac tctcagccc agtgtgaccc tggggcttgg 200  
 ctgagaagct gaccagccc caggccagc a 271

<210> 452  
 <211> 103  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(103)  
 <223> unsure at all n locations

<400> 452

caaggagaag cagataaaga agcaaacggc tntctgctga gctggtgaaa cancaagccc 50  
 aaggccca caagattcag ctgaagacgg tgatgggtga tct 103

<210> 453  
 <211> 284  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(284)  
 <223> unsure at all n locations

<400> 453

gccacagtc cagcgganc cagagccgt cccgcctct cctgtcggg cgatccccag 50  
 tctgtccca aatgcctgt ggacttcaac gggtaactga agatgctgag caacgagaat 100  
 ttcgaggagt acctgcgtgc gctcgatgtc aactgtggct tgcgaaaaat cqccaacttg 150  
 ctgaagccgg acaaagagat cgtgcaggat ggcgaccaca tgatcatccg cagctgagc 200  
 acttttcgaa actatatcat ggacttccaa gttgggaagg agtt 284

<210> 454  
 <211> 277  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(277)  
 <223> unsure at all n locations

<400> 454

```

ctctgcataa gggttttcca aattaagtct gtccagtaga gtgatttgct ttattattac   60
caagatatac acagctagtg aaccgtagca gcatgcgaag aggggctgta actatcacca  120
tacaatgcact gtcccgtgga ggtgtgacac gggagacgtg tggatcatgt gatcattgtg  180
aacaccttgt gagctttaaa ataaagtcca cctgtggtg tcaaaaaana aaaaananan  240
nannaggagn nannannnnn ggattangga ccccccc                                277

```

<210> 455  
 <211> 155  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(155)  
 <223> unsure at all n locations

<400> 455

```

gaatggaacc catgaggaat gccaccaaag gctgcaacga gtctgtagat gaggtccaca   60
ngggcatgta gctgccagga ctgctctgcc gtctgngtc ccaaaccoca tcccaccaa  120
tccctgacac actaataaag gctttgtgac ctcaa                                155

```

<210> 456  
 <211> 277  
 <212> DNA  
 <213> Rattus norvegicus

<400> 456

```

ggggattagc tctatctgac acctctgtta tcttcattct aaagtggggt catgctttta   60
ggggtggtgt ggccgggtgcc atggaagtgg taatgcatgt gttgatgcag ggattatgca  120
agctgaaact tgtttctcagg ggccatgtca gatgtgtgag aatacctgga ctctgggttt  180
tctccatag taaaggggtg ttctcccact ctctacaagt ctcttcatgc cagagggttt  240
tcaagactcc catttagtgg ccaggaggat ttcattg                                277

```

<210> 457  
 <211> 277  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(277)  
 <223> unsure at all n locations

<400> 457

cgangatett gagactgggtg tttctgtggt cactgggtgga caggatgtat gtagcgtgcg 60  
 cgtgtgtgta agtgtgggtg tgtgtgcgtg ctctgtctcat ctctagggaa ctctgagggtg 120  
 ggaagtggga ggtgggaggt ggagggaccc agtagtgaga agaactagga ggtgaggcct 180  
 aatggggcgc agattgtgca tgttttggtg ctgatgacag agggggccagt cccaggggag 240  
 gaggttngc gggecnactt tnttgtctcc tgtcgna 277

<210> 458  
 <211> 233  
 <212> DNA  
 <213> Rattus norvegicus

<400> 458  
 cctcattgaa catggctcca atgaattcac tatgttctga agacatgcaa gatttcatgc 60  
 caaatatata ttccagtcta aaaaaacaaa atcctgtgtt cagtttagaa tgttttgatg 120  
 tagctagaaa gctttgccc acaacaataa ctgaagctac tgtagtctcat aaagttcaca 180  
 tggctttata gcttttgcaa aacatatcta taaatcaatt actttttgaa aat 233

<210> 459  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(294)  
 <223> unsure at all n locations

<400> 459  
 gtttcgggga ggagggaagct cggggtgagt ccgaactaaa ccttgcggtc aagattcggc 60  
 gtcacccgta atccaccgcc ctggccgagg aaggcatagc tgctggaggt gtaatggacg 120  
 tcaacactgc tctacaagag gtgctgaaga ccgcctctcat ccacgatggc ctagcacgtg 180  
 gcatcgggga agtgccaaag ccttagacaa gcgccaaacc catctctgcg tgettgcac 240  
 caatgtgatg agcccatgta tgtcaagctg gtgnnggct ttttccgaa caaa 294

<210> 460  
 <211> 300  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(300)  
 <223> unsure at all n locations

<400> 460  
 atctggccat aatttaattc catctctagg tttctgtct tattgtttca gaggcacatc 60  
 gagaaccaac catgggcagc ttactaagg aagagttgac tgccatatcc tcgatgaagg 120  
 nttaactgct aaggacatcc tggacaaaa aatcaatgaa gttctcctct gatgataagg 180  
 atgctttcta tgttgccgac ctgggagacg ttctaaagaa gcactctgagg tggctgaaag 240  
 tcttcocgt gtaactcctt ctactgtca gtgtatgaca gcgagccata gtgagcacct 300

<210> 461  
 <211> 121  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(121)  
 <223> unsure at all n locations

<400> 461

cngctccgct cgtctctgaa cctcngtctt cagctcactg ccttcactcc agacttcacc 60  
 atgtccgtca gggtagacna gaaatcttan aagangtcca cctcnggtcc cggggacttc 120  
 a 121

<210> 462  
 <211> 133  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(133)  
 <223> unsure at all n locations

<400> 462

cgggggaccc agttgcagac nacgtgngtg cncangagcc acctcnggag tttgaaccan 60  
 gacctctata actcennnag gctgtcttca gcttgngnac agcctnagcc actccaaant 120  
 tngatcaaac gtt 133

<210> 463  
 <211> 281  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(281)  
 <223> unsure at all n locations

<400> 463

cnggcggcgg agacgttctg tcatttggtg cgggagggng cgcgagangg tgcgtcgagc 60  
 ctccggtgtc ccaaaactaga ggtgagcatg gcagaacagg aacctactgc tgagcagctc 120  
 gctcagatag ctggagagaa tgaggaagac gagcactctg tgaactacaa gcctccagcc 180  
 cagaagagca tccaggagat ccaggaactg gacaaggatg atgaaagcct tcgaaagtac 240  
 aaggnggccc tgctgggccc agtagctgtc tctgcagacc c 281

<210> 464  
 <211> 264  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(264)  
 <223> unsure at all n locations

<400> 464  
 gctccgggng cnetgcgcgc cgnngngttc tgtgncttgc nggtctgttc cctccgattg 60  
 tgcctancaa tgaccaacca gcagantgtt ctccagggcc cgggacceng ggggtttccga 120  
 ntctggggcg gcaaggactt tgagcaacct ctgcacattt cccgggtcac tcccgggagc 180  
 aaggntgnta tagctaactt atgcatagga gatttnatca cagccattga tggggnagat 240  
 accancagta tgacaaatnn gaag 264

<210> 465  
 <211> 277  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(277)  
 <223> unsure at all n locations

<400> 465  
 gttcttaggg aggtctctctg caataggtgc cgggccacgc ttttttttca aaatgtctac 60  
 tgtccacgaa atctgtgtga acnctcagct tggaggggtga tcattctaca cccccaagtg 120  
 ccnatgggtc ggtcaaaccc tacaccaact tcgacgntga gagggatgct ttgaacattg 180  
 aancagcaat caagaccaaa gggtgggacg aggtcaccat tgtcaacatt ctgactaacc 240  
 gcagcaatgc acagaggcag gacattgcct tcgccta 277

<210> 466  
 <211> 249  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(249)  
 <223> unsure at all n locations

<400> 466  
 tgggatcccc aggggctaatt gggcactctg ttcttgacgc aggggnactgt gagaaagtct 60  
 ctacacgtga ccaagtttct ctgagtgctc agccaacca ggctcaccag ctccctcnag 120  
 ctacgcncg tccatcaggt caactgccaa ccccaggtg aanaccaaac ccagctatga 180  
 gctctgggag gcattgactcc ctccaggcca gcagctccga tccctcccag tagtgatcat 240  
 gggcnaggg 249

<210> 467  
 <211> 253  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(253)  
 <223> unsure at all n locations

<400> 467  
 tacacgcgc cgcttgtncc gccgccatgt ccctagtcat ccccgagaag tttcagcaca 60

tcttgcgagt actccaacac caacatcgat gggcggcgga aaatagcett cgctatcact 120  
gccattaagg ttctggccaa cggctctagac aacaagctgc gtgaggacct ggagcggctg 180  
aagaaaaatcc gagcccatag agggctgcgc cacttttggg gccttcgtgt ccggggtcag 240  
cacaccaaga cat 253

<210> 468  
<211> 301  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(301)  
<223> unsure at all n locations

<400> 468

gctttctatg ttgcggacct cggagacgtt cttaaagaagc atctgagggtg gctganagta 60  
cttcccgctg ttactccctt ctatgctgtc aagtgtaatg acagcagagc catagtgage 120  
acctggctg ccattgggac aggatttgat tgtgcaagca agactgaaat acagttgggtg 180  
caggagcttg gggtgccctc agagaggatt atctatgcaa atccttgtaa gcnagtgtct 240  
cagatcaagt atgctgccag taatggagtc cagatgatga cttttgacag tgaaattgag 300  
t 301

<210> 469  
<211> 136  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(136)  
<223> unsure at all n locations

<400> 469

ttccggcgga ggcgctctt tctttttctc cgcagggtgc gcggtggcag ccgctgcggt 60  
gcttggtctc ctaagctatc cggcgccatc cttgtcgttg cggcgacact cgcaacatct 120  
gcagccatga ccgagc 136

<210> 470  
<211> 147  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> unsure  
<222> (1)..(147)  
<223> unsure at all n locations

<400> 470

attaaggaaa atggaggctc ggactcagag gaagtcttat ccnatgaag caaaaggatg 60  
gatctttgta aatacagagc tgagtatgnc tngtggttaa acgancacag ggtntgtggt 120  
atccccctcg caaagagtna ngccttc 147

<210> 471  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(294)  
 <223> unsure at all n locations

<400> 471

gctacacagga cagctcatca tgtggggaga aatgttgggc gctgctatag gaggagtgtg 60  
 ggctgtncgc agctgcaccc gncgctctg tctgccgtgg gcttcactgg gtcaggcatt 120  
 ggcagctgca tcccatagcg ggncaagatg atgtctgctg cagcagttgc caacgggggc 180  
 ggagtcgnen caggaagcct tggtagccan actacagtec antangtgta tttggnttn 240  
 tccacatna ancaacnate catcttgggg tcttttgng naanccatna gagt 294

<210> 472  
 <211> 300  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(300)  
 <223> unsure at all n locations

<400> 472

attccagcga gagacagagg gagtgcgcgg gcgggttggg agagcccagt gtgcagagcc 60  
 ccactccggg ctctcttagga aggcagctct ggagtgcgaa gggctttgcc tccaggttg 120  
 ctgcctctc gacccaatcc tccgctgac ccaacatcag cggtcgcaac cctcgccgcc 180  
 tctgggaaac ttgcccatt gcaacgggca gacacttctc actggaactt acaatctgcg 240  
 agccaggaca ggatccccag gcgcagggan ggaattttgt ctattgggac agtgttctct 300

<210> 473  
 <211> 276  
 <212> DNA  
 <213> Rattus norvegicus

<400> 473

gacctcagc agtcttgat tcagaatgga accatcaaag acaacatcct gtttgggtcc 60  
 gaatacaatg aaaagaagta ccagcaagtt ctcaaagcat gcgctctct cccagacttg 120  
 gaaatattgc ctggaggaga catggctgag atcggagaga aggggataaa tctcagtgg 180  
 ggtcagaagc agcgagtcag cctggccaga gctgcctatc aagatgetga catctatatt 240  
 ctggaacgat cctgtcggc tgtggatgct catgtg 276

<210> 474  
 <211> 155  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(155)

<23>        unsure at all n locations  
 <400>        474  
 atcagctctc tgacacctga gagggatcag ccagagtaag agtcgtgggc ttgattgtaa    60  
 atcagaata gcctaagagt gaagcaanca ctctgccatt acttgggant ctctgctc    120  
 cgtctgaga ggatgtgtcg gagaggttca ccagc                                155  
  
 <210>        475  
 <211>        282  
 <212>        DNA  
 <213>        Rattus norvegicus  
  
 <220>  
 <221>        unsure  
 <222>        (1)..(282)  
 <223>        unsure at all n locations  
  
 <400>        475  
 gggncggctt ggtggcctcn attgagatnc ngaggatcna aggactgtgt anctacaatg    60  
 ttgtcaagac ttttccgtat gtatggntc tttgnggtgt ctcatcnng ggaggtaatt    120  
 gggggaacgg tgacacttac tatctgtatg atgnccatga acatgttcac cggcaacaac    180  
 aagatctgtg gttggaatta tgagtgccca nnatttgaag angacgtgt gancagcgac    240  
 atcatcance tcagganaan ccggtnatcg ccatecgtac at                        282  
  
 <210>        476  
 <211>        325  
 <212>        DNA  
 <213>        Rattus norvegicus  
  
 <220>  
 <221>        unsure  
 <222>        (1)..(225)  
 <223>        unsure at all n locations  
  
 <400>        476  
 gggcgctcgg actgagcagg gcttctcttg ccagtggatt gtgtagagtg tacagccagt    60  
 ctcttctctt ctgtccaaca tggcatcttc tgatatccag gtgaaatgt tccggccagg    120  
 ctttqagtga tccagcctcg atcaaaagaa ttgtcccgag tccccttcc cccaaagaga    180  
 ggncttcttg agaatcagag aatagantga agaaaganct agaca                        225  
  
 <210>        477  
 <211>        396  
 <212>        DNA  
 <213>        Rattus norvegicus  
  
 <220>  
 <221>        unsure  
 <222>        (1)..(296)  
 <223>        unsure at all n locations  
  
 <400>        477  
 aggacaccga gattgagatc tcgcacnctt cactggtaga aagggaatc aataaagccc    60  
 agaacttgat ngctggggaa gggttgaaga ttagctctga tctcattagc ttggaggtta    120  
 gctctccaca tgtccagac ctactctga ttgaccttcc tggatcaca agagtggctg    180



tgggtgacca gctgcagac atcgaacaca agatcaagan acttatact gaatacatcc 240  
 agaaacagga gaccatcaac ctggtggtgg tccccagcaa tgtggcattg ccacca 296

<210> 478  
 <211> 294  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(294)  
 <223> unsure at all n locations

<400> 478  
 gacagcactc tgcattgctt agagagcagc tccccctctt ccccactgtc agccagtgcg 60  
 cagttcacct ctgtgggctg cggagcacct ctgcgcagc ccagacatct tccctgagca 120  
 gaggtagaac aagcataggg gctttcagaa taccctagcc gtctccgga agtctggttt 180  
 gnttgaatc actctgaaag ccaaggagtt gattcgctag aaccaagcaa cttaggtgna 240  
 actgaccag ctgaaggagc aaaccagatg ttnatagagg ccaccaagac aggg 294

<210> 479  
 <211> 281  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(281)  
 <223> unsure at all n locations

<400> 479  
 aaatctgac aaaagaatct aatgttcagg aggttcgatg tccagtcact gtgtgtggag 60  
 atgtgcattg gcaatttcac gacctcatgg aactctttag aattggtggt aaatcacaga 120  
 tacaattac ttgtttatgg gagactatgt ggacagagga tattactcag ttgaaacagt 180  
 tacattgctt gtagctctta aggttcgtta ccgagagcgt atcaccatac tccganggaa 240  
 tccagagagc agacagatca cacaagttaa tggtttctac g 281

<210> 480  
 <211> 293  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(293)  
 <223> unsure at all n locations

<400> 480  
 ggccgagcag tcaactgttt angagctctg agcctggca gctgcacact tcagttcacc 60  
 aaccagaggc ctttctctct gnggaagggg tgganatagc tgtttaaaga cactgcaacc 120  
 agaaagccaa gcattctgtc actaagcagg anactgagtg cccacttggg agaagaaata 180  
 aaagatggtt cttagcacag aggaaaacag gagtgttgat ttagtcaact taccagtg 240

cccactgccc gatggagagg ctggcgtagg ggagaacaac gggattcctt gna 293

<210> 481  
 <211> 298  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(298)  
 <223> unsure at all n locations

<400> 481

ctccagctag ctccagtctca cagcctaagc ccttaaagcg ttccaaacga gctacaggga 60  
 agaaaggctc ccgcacctgt caggggtctg gtgcagagtc tgaagnctg tatgactttg 120  
 tttttattgt ggcgtgtgag aaataggatg gtgaagagat ggagattggg gaagtagctt 180  
 ggggyaactc tggatngatc aatnccagc tngtttggg gtccnagcc anaagaggca 240  
 nncccagnng attcgnaat ttgnncaenc ctggagctgt cnacaattcc tcttcenc 298

<210> 492  
 <211> 65  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(65)  
 <223> unsure at all n locations

<400> 492

ggtgangtga agctgctaaa cccattttg gctgctgctg tggagatgct gtgctttgag 60  
 agtna 65

<210> 483  
 <211> 270  
 <212> DNA  
 <213> Fattus norvegicus

<220>  
 <221> unsure  
 <222> (1)..(270)  
 <223> unsure at all n locations

<400> 483

ggccggccgt gaggngcgt ggagctgccg gtactggttt tggattagga atggttttct 60  
 cctcacctt ccttaagaga agaaagtggc cattagcctt tggttctggc gtgggactgg 120  
 ggatggccta ctccaactgt cagcatgact ttcaggctcc atatcttcta catggaaaat 180  
 atgtcaaaga gcagtactt atgtangaa catcccagc ggagaaaaga gaagcctcgt 240  
 ttattctca ggaatactga agtgcctgg 270

<210> 484  
 <211> 277  
 <212> DNA  
 <213> Fattus norvegicus

<220>

<221>        unsure  
 <222>        (1)..(277)  
 <223>        unsure at all n locations  
  
 <400>        484  
  
 gggaagctac ctatccggta gacagctccc cctgcaccta cggetgccat gacttccgca    60  
 ctgacccaag ggetggaacg aatcccagac cagcttgget acctggtgct gagcgaaggt   120  
 gtagtgctag cgtcatctgg ggatcttgag aacgatgagc aggcagccag cgccatctna   180  
 gagctggtea gcacagcctg tggcttccgg ctgcaccatg gcaagaacat ccccttcaag   240  
 cgcctgtctg tggctcttgg tgaacacagc ctgctgg                                277

<210>        485  
 <211>        279  
 <212>        DNA  
 <213>        Rattus norvegicus

<220>  
 <221>        unsure  
 <222>        (1)..(279)  
 <223>        unsure at all n locations  
  
 <400>        485  
  
 caatgactca cagcgacagg gccastaagg atgctggcca gatctctggg ctaaatgtgc    60  
 tccgagtgat caacgagcct acagstgcag ctctggctta cggctctggac aaatccgaag   120  
 aaaaagtcac tgetgtatat gatttaggtg gaggaacctt tgacatttct atcctggaaa   180  
 ttcagaaagg agtggtttan gtgaaatcca ccaatgggga cactttctta ggaggtgaag   240  
 actttgacca agctttgtta cggacattg tcaaggagt                                279

<210>        486  
 <211>        204  
 <212>        DNA  
 <213>        Rattus norvegicus

<220>  
 <221>        unsure  
 <222>        (1)..(204)  
 <223>        unsure at all n locations  
  
 <400>        486  
  
 ggggttaenn cttgcagtcn gtcgctggtt tgcaaatatt gcgtgggctc ngcgcgctgc    60  
 gggtgcggg anggtccgga cccggcgctc gattgcagcg ccatccagtt tgcattgaac   120  
 ttccacctgc gctcccggga acagtttctg ctccgactcc tgatcgttca cctccctggt   180  
 ttcccagacag cggggactgt cttt    204

<210>        487  
 <211>        290  
 <212>        DNA  
 <213>        Rattus norvegicus

<220>  
 <221>        unsure  
 <222>        (1)..(290)  
 <223>        unsure at all n locations  
  
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